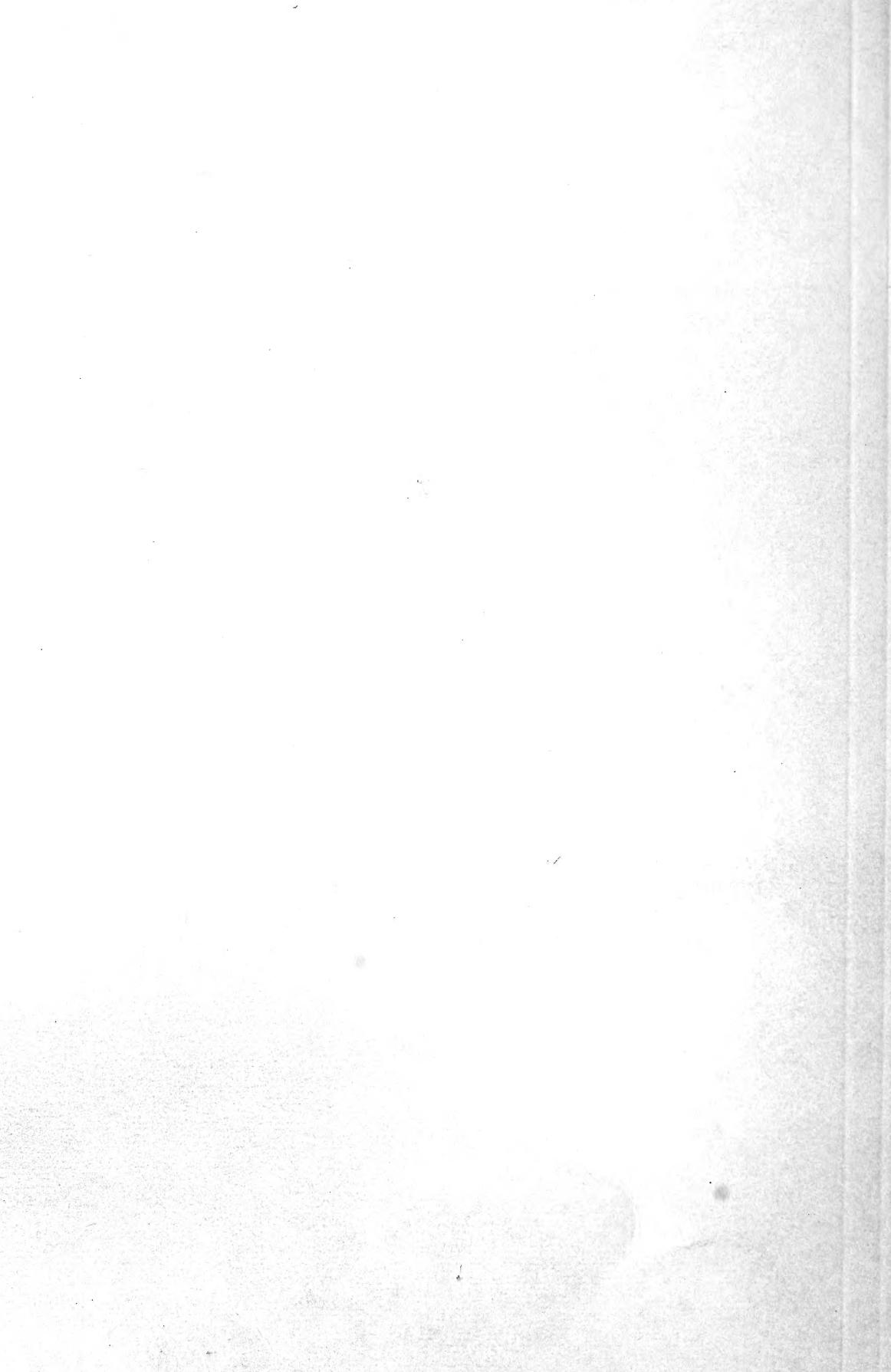


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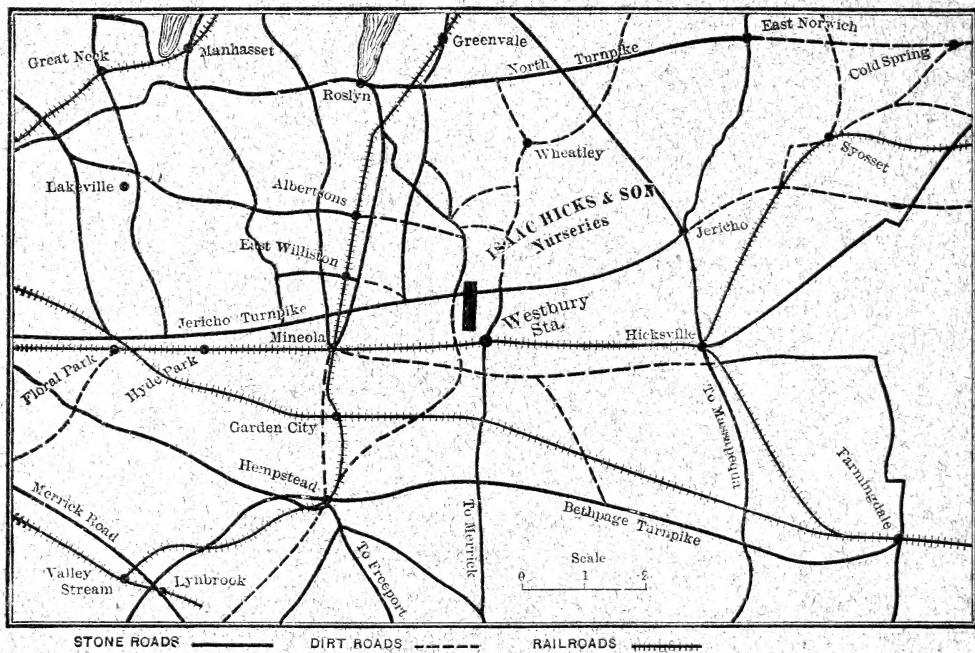


TREES FOR
LONG ISLAND
ISAAC HICKS AND SON
WESTBURY NURSERIES
Westbury Nassau Co.,
New York

COVER ILLUSTRATIONS

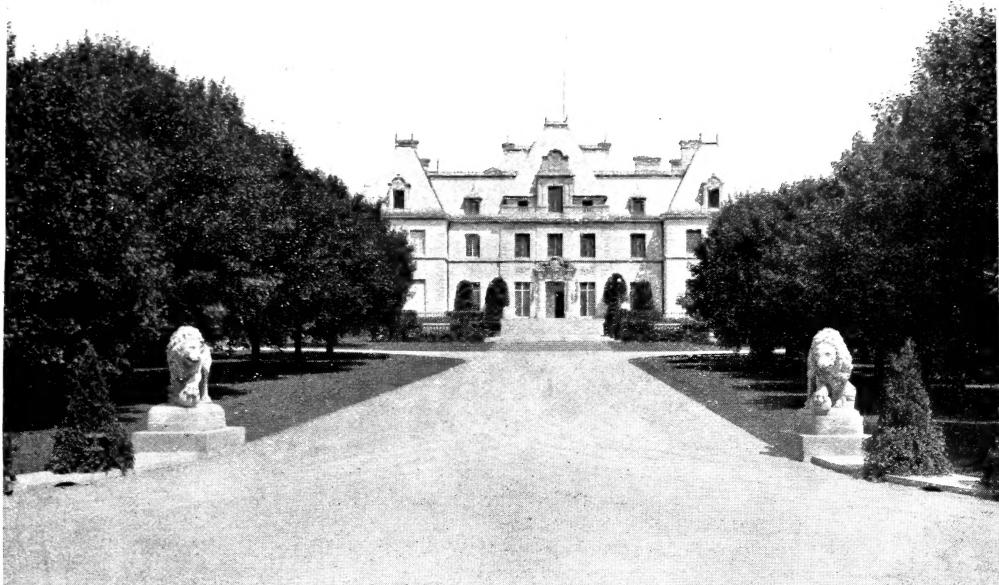
The picture on the front cover page is of a Linden, at the left, moved by the Hicks' Patent Tree-Mover, in 1894. The size when moved was about 14 inches in diameter, 35 feet high and 30 feet spread. This shows the permanent luxuriant growth resulting from the methods of our invention.

The picture on the back cover page is of Foxglove.



Our Nurseries may be reached by the good stone and gravel roads for which Nassau county is famous. Westbury station is twenty-two miles from Long Island City on the main line of the Long Island railroad. It has over twenty trains per day. Many visit our Nurseries by taking a hack from Mineola, with forty-three trains per day, whereby a half-day trip can be easily arranged. Mineola has lines of trolley to Roslyn and Port Washington, to Hyde Park and Jamaica, to Hempstead, thence in two directions to Queens and Jamaica, and to Freeport, Lynbrook, Rockville Center, Valley Stream and Jamaica.

The Mineola-Hicksville trolley passes the south end of our Nursery, two-thirds of a mile from our office. Car going west leaves 45 minutes past the hour, arriving at Mineola on the hour; going east, leaves Mineola five minutes past the hour.



Large Norway Maples moved for Mr. Clarence H. Mackey, Roslyn, L. I. We moved about one hundred of these trees on the Hicks Patent Tree Mover in 1901-2. They were 12-16 in. in diameter, 30-36 ft. high, and 25-33 ft. broad. Four rows were planted bordering the entrance avenue and trimmed to symmetrical form.

TREES FOR LONG ISLAND

EDITION 1910

*Westbury Nurseries
Hicks Patent Tree-Movers
LANDSCAPE PROBLEMS*

A DISTINCT HELP.—See index for the illustrations and paragraphs giving solutions of landscape problems,—how to get immediate shade for the house,—to screen the service court,—to have a home supply of fruit,—to have a hardy flower garden,—to immediately and permanently screen unsightly buildings,—to plant at the seaside, etc., etc.

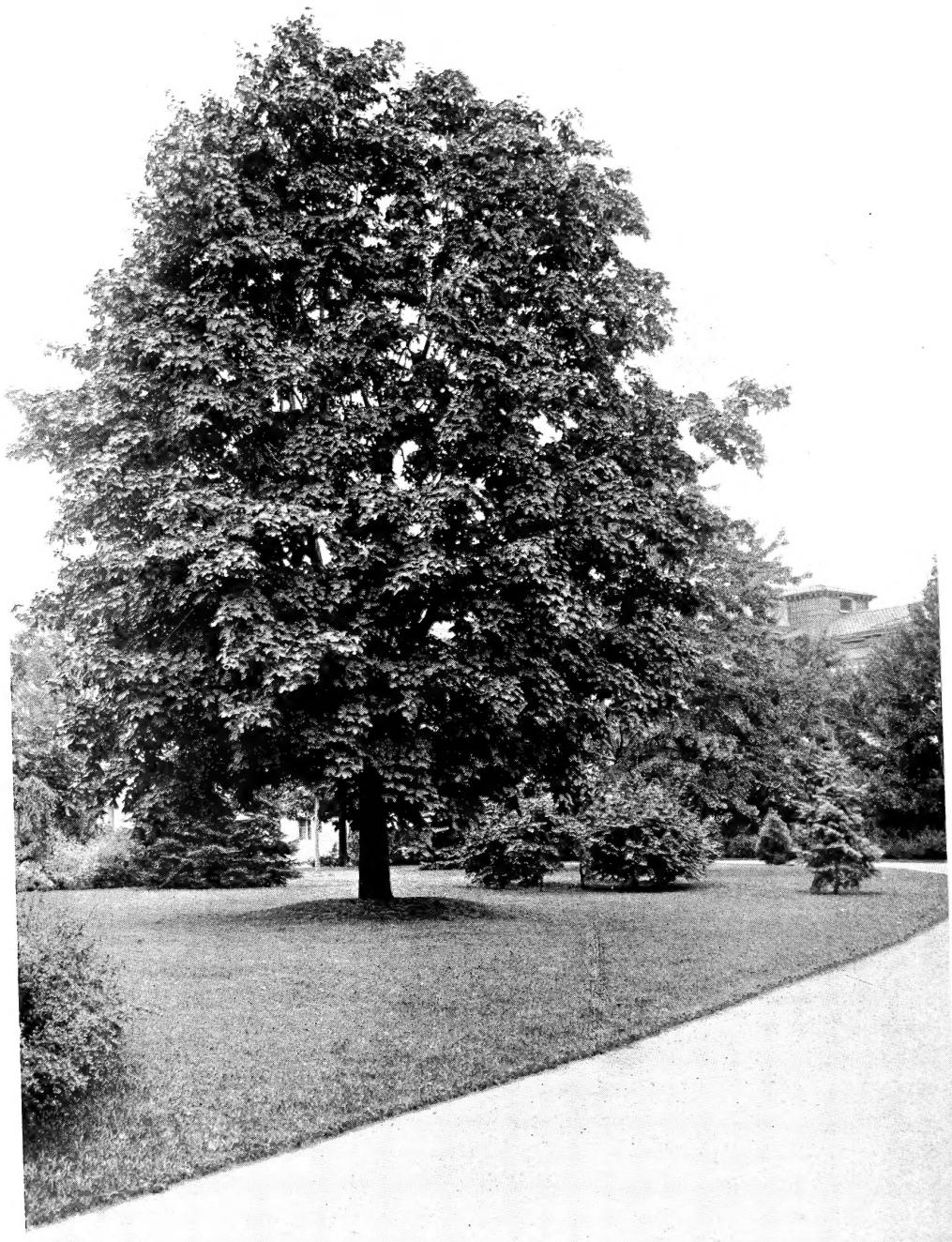
ISAAC HICKS & SON

EDWARD HICKS .. HENRY HICKS

Westbury, Nassau County, Long Island, New York

Telephone 68 Westbury

Illustrated by photographs of trees which we have moved, and of places most of which were planted with stock from the Westbury Nurseries. Views on pages 20, 51, 56, 58, 64, 65, 70 and 92 are in the Arnold Arboretum, or in the grounds of its director, Prof. C. S. Sargent.



Large Norway Maple moved in 1901 for Mr. W. D. Guthrie, Locust Valley, L. I. The site was cleared from a dense forest, and about 50 large trees were moved in. This tree was then about 14 inches in diameter, 35 feet high and 30 feet spread.

PREFACE

 HIS is a different nursery. It fills a wider range of landscape needs. It saves more years of your lifetime. It offers trees which more accurately fit the requirements of your soil and climate.

Over fifty years ago the Westbury Nurseries were founded by Isaac Hicks. The constant aim has been to fit Long Island, recognizing its marked difference from the mainland in geology, soil, drainage, ocean influence, humidity, severe winds, drought, peculiar agricultural and suburban conditions.

Our Nurseries may be reached by the good stone and gravel roads for which Nassau county is famous. Westbury station is twenty-two miles from Long Island City on the main line of the Long Island railroad. It has over twenty trains per day. Many visit our Nurseries by taking a hack from Mineola, with forty-three trains per day, whereby a half-day trip can be easily arranged. Mineola has lines of trolley to Roslyn and Port Washington, to Hyde Park and Jamaica, to Hempstead, thence in two directions to Queens and Jamaica, and to Freeport, Lynbrook, Rockville Center, Valley Stream and Jamaica.

Planting Seasons. The spring season commences about March 1 to 10, when the frost is nearly out of the ground. For deciduous trees and shrubs it continues to about May 10, but many trees and shrubs can be moved later than that by stripping off the foliage or by taking them with a ball of earth. Evergreen trees can be moved in the spring and during May and June, because they are taken with a ball of earth. For evergreens, August and September are also excellent months, a fact but little known, but which should be widely utilized, as it enables many to plant who cannot get all accomplished in the spring. Large evergreens, 8 to 40 feet high, are safely moved with balls of earth any week in the year. (See, also, evergreens, page 29.)

Hardy flowers can be planted in spring, and we have no trouble in making them live, even after they have started growth in May and June, for they are taken up with a good-sized mass of earth on the roots. September and October are excellent months for planting these hardy flowers, as they get well established before winter.

Deciduous trees are moved in the autumn, from the time the leaves ripen in September until hard freezing of the ground in late December or January. A month can be added to the usual planting season by starting in September and stripping off the leaves. It makes no difference whether the foliage is stripped off by hand, or whether it is taken off a few weeks later by the frost. The moving of deciduous trees can continue all winter by mulching the trees and the sites to keep out the frost.

Fall planting is not advised with Magnolias, Tulip, Liquidambar, and a few other varieties, unless they have balls of earth. The reason is that some have soft, spongy bark on the roots, which decays unless the ground is warm as in April, so that new growth can take place immediately.

Kindly remember this: The time of the year for transplanting is not one-tenth as important as people imagine it. Permanent fitting of trees to the conditions is the most important. We attend to both.

Tree-Planting, Tree-Moving, Spraying and Pruning. We furnish competent foremen and men for various kinds of horticultural work on Long Island and elsewhere. We wish to limit it mostly to planting stock from our Nursery and to moving large trees.

BUSINESS TERMS

Prices and Delivery. Prices on ordinary-sized nursery stock are usually for stock dug and loaded at the Nursery. Delivery by wagon is charged according to distance and expense. Stock to be shipped by freight or express will be carefully packed in straw bales and boxes charged at cost. Delivery to railroad is free, where our responsibility ceases.

Large trees on a tree-mover, and large evergreens, are priced as follows: (1) To include delivery and planting in hole prepared by us; (2) to include delivery and planting when hole is prepared and assistance rendered by purchaser; or, (3) delivery and planting charged by the day.

Landscape Plans. This department has been discontinued, as explained on page 11 and on page 3 of our booklet on large trees, entitled Hicks' Trees.

Terms of Payment. NET CASH. Accounts will be subject to sight draft sixty days from the date of shipment. Unknown correspondents should send satisfactory reference or cash with order. Money orders may be obtained for Westbury, Nassau County, New York.

We desire that all our customers be fully satisfied, and wish to be promptly notified of any errors that they may be rectified. We do not agree to consider complaints later than ten days after delivery.

True to Name. Without boasting infallibility, we warrant our stock true to name and will replace any that may prove otherwise or refund the original price, but we will not be held responsible for more than the original price of the trees.

Substitution. Late in the season we may be out of some varieties and sizes of fruit and other trees, and will substitute similar varieties and sizes unless otherwise ordered.

Guarantee. The living of trees is largely dependent upon conditions of weather and after-care beyond the nurseryman's control, therefore we do not guarantee trees to live after leaving the Nursery in good condition, without previous agreement and special price. If guarantee is desired, customers are requested to so state when asking prices.

Address all orders to Isaac Hicks & Son, Westbury, Nassau County, New York. Local and long-distance telephone, 68 Westbury. Telegraphic address, Westbury New York.



Large European small-leaved Linden moved in 1893 for Mr. Thomas Hitchcock, Jr. The tree screens the kitchen and laundry yard. An old farm-house was added to and extended out beyond an old grove of trees. This tree was moved from our place to balance the landscape composition. Size, when moved, about 14 inches in diameter, 36 feet high and 28 feet spread.

Moving of Large Deciduous Trees

We have developed this to a permanent success, as demonstrated by the numerous photographs in this Catalogue and by two or three thousand large trees we can show. It is as sure an investment as the planting of ordinary-sized trees. In fact, our records show that it is much more certain.

This result has been accomplished by persistent, scientific and mechanical work during the past thirty years. It has been made possible by the large number of patrons of landscape art who have been willing to go to the expense of quickly completing the beauty and comfort of their country residences by planting large trees. Another factor is the good roads, permitting a long haul of heavy trees. Another is the sandy subsoil, free from rock, which permits the growth on Long Island of numerous fibrous roots and their preservation by methods of digging which we have invented.

Our success is due to many factors which it is impossible to accurately define, but which result in the ability to decide the comparative difficulty of moving various trees. We are frequently called on to move a certain tree. It requires some financial courage to decline profitable work, but it has proved good business and horticultural practice.

The wide system of roots is a unique part of our method which is especially essential to the best immediate and permanent growth of the tree. We do not know of any other system of large-tree-moving which employs it. It is the principal reason for the expense of the work. A little calculation will show why it is so. A broad-leaved tree, as Maple, Elm, Oak or Linden, has an immense surface of foliage constantly evaporating. There comes a time of drought with hot sun and drying winds when the soil is dry. Moisture must be drawn from a wide area, or else the tree will drop its foliage or allow some of the branches to die. By our system, there are roots drawing moisture from the whole circle of 30 or more feet in diameter.

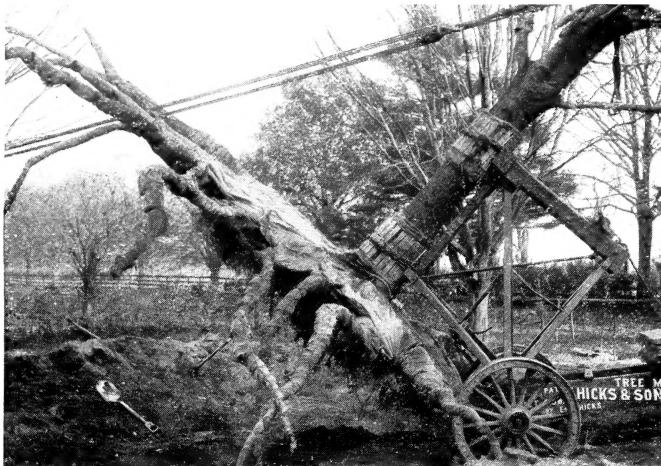
There is a popular opinion which we run against in many parts of the country where unscientific methods of moving large trees have been practised, that large trees live a year or more, but become ragged and thin, and either are unsightly for several years or die after struggling a few seasons. This is based on the method of moving deciduous trees over 10 inches in diameter, 25 feet high and 20 feet spread, with less than 8 feet spread of roots. Six or 8 feet spread of roots may be just sufficient for some easily transplanted species not over 8 inches in diameter, 25 feet high and 15 feet spread, but it does not lead to sure or vigorous growth. Our method has at least ten times as great an area for moisture supply, as can be seen by comparing the area of an 8-foot circle with one of 30 feet.

This explanation should silence the statement, "Big trees cannot be moved; They always die; It doesn't pay; They are always stunted; Small trees overtake them." However, as erroneous ideas die slowly, we expect to repeat this explanation and show the proofs for many years to come.

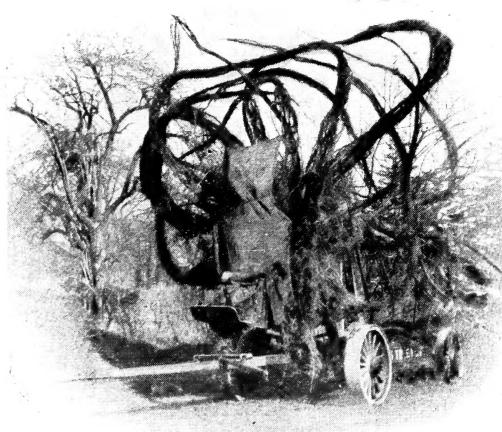
To any one in doubt, who wishes evidence before undertaking large tree-moving, we offer to show them, by an automobile trip around this region, several hundred large trees that are vigorously growing at full normal density. We can show the locations of some failures and the reasons why.

How to Order. Decide what you need large trees for, and look through this Catalogue for trees offered which may fill that requirement, or write us, stating your needs. A visit here is a help and so is a visit on our part to your place.

We can deliver large trees by tree-movers, over the roads, to any part of the western half of Long Island. We can ship, by rail, large deciduous



One of the Hicks' Patent Tree-Movers.—We have invented the method of digging which preserves the small feeding roots. The roots have a spread of 30 or 40 feet. After digging, the tree is grasped by the hinged cradle and swung over horizontally by a screw. In this position, trees may pass under electric wires.



Illustrating root-system of 100 avenue trees moved for
Mr. Clarence H. Mackey

trees up to 30 feet high and 20 feet spread of top. Such trees can also be delivered by truck to northern New Jersey and Westchester county. A group of such trees will often give more shade or screen than a single larger tree, and do it at less expense.

If you wish us to look up trees for moving into your place, we can do this and make a report with photographs of trees available. The distance from which trees can be moved in is much greater than people imagine. They often think the supply is limited to two or three miles, when better trees, at slightly greater expense, can be procured at ten or twenty miles.

If you have a certain tree you wish moved, or wish to sell us, send the species, circumference at 3 feet, the spread of branches and approximate height; soil, if loamy, sandy, clayey or rocky; distance to be moved; obstructions, as wires, sidewalks and banks. We can then give a preliminary report and decide whether a personal visit is advisable. We have seen so many mistakes made in selection of trees to be moved that we must decline to omit this visit of inspection on the score of economy.

We do the work by contract or by day's work, with or without guarantee, as may be arranged. It is often practical to employ some local labor and teams in preparing the hole, etc. The operation of moving a large tree is a surgical one, and consists of dissecting out the fine feeding roots and re-arranging enough of them to support the tree. The ways and means of doing this require skill and training and the ability and machinery to cope with various conditions which may arise. No one machine or method suffices. We have a large number of different sizes and types of machines and apparatus, and our men are trained in the methods which must be used to safely handle various species and sizes of trees and to overcome the difficulties of transporting and moving them. It is not practical to say just how large a tree can be moved; it depends on the obstructions on the road more than any other factor. We frequently move trees up to 24 inches in diameter, 60 feet high and 40 feet spread.

The operation of moving a large deciduous tree consists, first, of dissecting out the fine feeding roots over a circle approximately as wide as the top. In the center there is left a ball of earth 5 to 10 feet in diameter. After a tree is loosened from the subsoil, it is attached by the trunk to the cradle of the tree-mover by two chains and turnbuckles, which grasp the trunk. The bark is protected by cushions and slats. The tree is laid over to a horizontal position by swinging the cradle by the screw and by rope and tackle. The roots on the side nearest the ground are bent back under the axle and tied up to the frame of the mover. A full circle of roots is thus preserved. The front axle does not swing round to break these lower roots because the wheels are on pivots, like an automobile. To go on the road, the roots are parted to insert the seat and pole, and the tops and roots are bent down to go under electric wires. When the roots are to be out of the ground for a day or more, they are wrapped to lessen drying.

Ready for the Road.—The tree is loaded with shortest branches and roots on top, so it can go under electric wires, which are lifted by a T-pole. Four to eight horses or traction engine, broad tires, and planks over lawns, enable heavy trees to be moved. Rope and tackle or windlass are also used in difficult places.

The preparation for planting usually consists in preparing a hole as wide as the roots, say 25 to 33 feet and $1\frac{1}{2}$ to 2 feet deep for a small area in the center about 8 feet across. The balance of the hole may be 8 to 12 inches deep.

In planting, it is best to pack the earth in and around the central roots and then spread out the side roots and plant them at different depths near the surface. The soil should not be too rich in organic matter, or it may turn sour and rot the roots. It is also necessary to see that the ground does not get water-soaked, for this would have the same effect. Under-draining, in heavy soil, is advisable. Examining the soil about the roots to see its condition should be a guide for watering. Watering once a week, with one inch of water, is a safer rule than watering every day, for the latter has killed trees. The surface of the ground had best be kept mulched for the first two years by either a dust mulch, produced by hoeing 3 inches deep once in two weeks, or by mulching with 4 inches of a strawy manure or leaves. Trees have been killed by too much manure, which sours the ground and excludes the air.

The Moving of Large Evergreen Trees

The methods we have developed for moving large evergreen trees differ from those explained for deciduous trees. The essential is a large ball of earth. The ball of earth is necessary because evergreen trees are constantly evaporating, and also because the roots of evergreens, if bare of earth, become quickly dried out and, because of their resinous sap, do not again take up moisture and live. To hold this ball of earth, we have invented a unique and economical apparatus for clamping the earth firmly and cutting off the ball from the subsoil. The roots outside of the ball of earth are bent around against the ball and preserved.

The question may be asked, why we move an evergreen tree with less spread of roots than a deciduous tree. The reason has been carefully determined by the German scientific foresters. A Pine, Cedar, or other coniferous evergreen, will use from one-fifth to one-tenth as much water per year as a broad-leaved tree,





The effects of the venerable Italian Gardens are reproduced with old Red Cedars moved by methods of our invention. These two views represent two vistas crossing in a circle of tall Cedars, similar to the Villa d'Este, in Italy. Garden of Mr. Stanley Mortimer, Wheatley Hills, L. I. Mr. Nathan F. Barrett, Landscape Architect.

as Maple, Elm, or Oak, of the same weight. Evergreens usually live on drier ground than deciduous trees. Their narrow leaves have less chance for evaporation. The function of the resin is to check evaporation, therefore, while an evergreen needs a constant supply of moisture, it needs much less than a deciduous tree to successfully re-establish itself after transplanting.

We are able to economically load and transport these heavy trees, having invented several trucks for the purpose. One of them looks almost as strong as a freight car. In it the weight of the tree is about balanced on a steel shaft 4 in. in diameter, and the tree is swung over horizontally by two screws 9 ft. long.

The result of our work has been almost a uniform success. No one need hesitate on that score. For a small percentage, we will guarantee the trees not to die from transplanting.

The season for moving large evergreens is all the year. We endeavor to avoid moving large evergreens during March, April and May. It is a good season for the work, but a large part of the deciduous trees and shrubs must be moved then, and the evergreen moving can be done equally well in August and September, and also during the winter.

Long Island must inevitably become an all-the-year-round suburban residence region. Evergreens are essential, both to privacy and to beauty of the landscape. We have available over 2,000 large evergreens ready for delivery, and it is possible to save ten to thirty years waiting. For further discussion of evergreens, see that department on page 29.

We can ship evergreens up to 25 or 30 feet in height, by rail. They can be very safely shipped in this manner, because the ball of earth supplies moisture to the top.

We have supplies of large evergreens in several parts of the country and can make quotation on deliveries in carload lots.

We can look up a supply near a proposed planting, as mentioned under deciduous trees, and can send men and apparatus to move them.

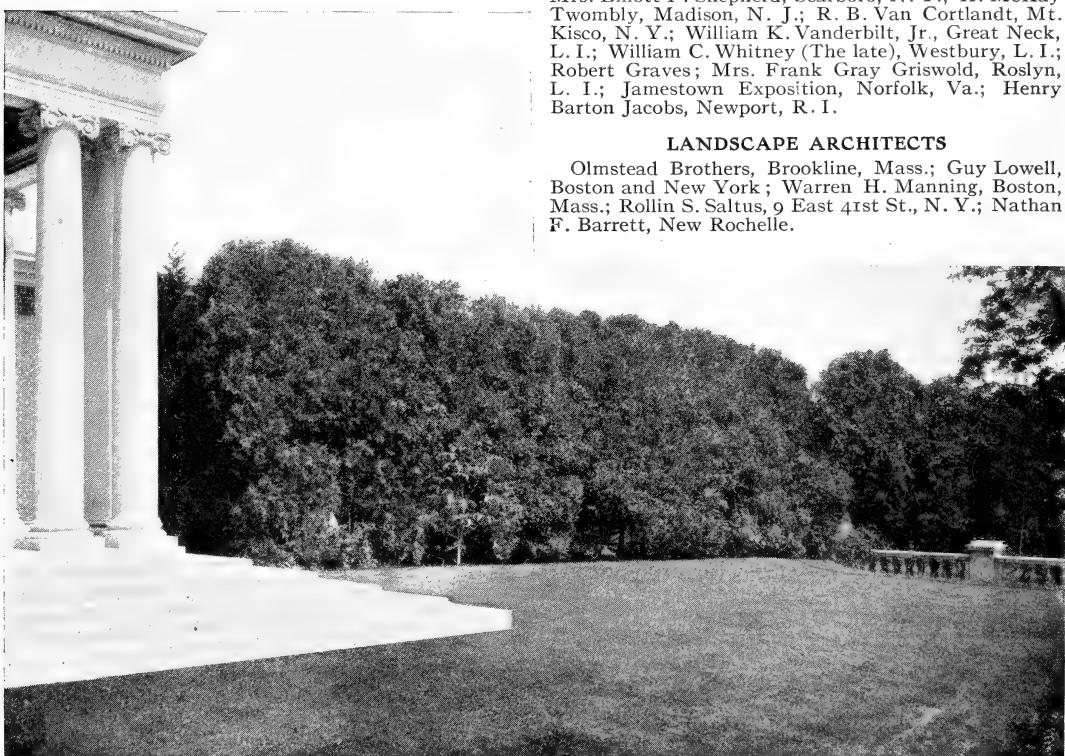
In addition to those represented by photographs, the following are some for whom we have moved large deciduous trees, 12 to 24 inches in diameter of trunk, 25 to 65 feet high and spreading 20 to 45 feet, or large evergreen trees 18 to 35 feet high.

F. Lothrop Ames, North Easton, Mass.; Mrs. George T. Bliss, New York; Mrs. O. H. P. Belmont, Hempstead, L. I.; Winthrop Burr, Cedarhurst, L. I.; Robert L. Burton, Cedarhurst, L. I.; Arthur Brisbane, Hempstead, L. I.; Middleton, S. Burrill, Jericho, L. I.; Robert Bacon, Westbury, L. I.; Paul D. Cravath, Locust Valley, L. I.; Paul Dana, Dosoris, Glen Cove, L. I.; Lewis Eldridge, Hempstead, L. I.; Albert Francke, Lawrence, L. I.; Garden City Co., Garden City, L. I.; William D. Guthrie, Locust Valley, L. I.; August Heckscher, Huntington, L. I.; Thomas Hitchcock, Jr., Westbury, L. I.; Clement S. Houghton, Newton, Mass.; George L. Hubbard, Garden City, L. I.; Col. William Jay, Katonah, N. Y.; Marshall C. Lefferts, Lawrence, L. I.; Dr. D. H. McAlpin, Morris Plains, N. J.; Edward D. Morgan, Westbury, L. I.; Stanley Mortimer, Roslyn, L. I.; Clarence H. Mackey, Roslyn, L. I.; William G. Oakman, Roslyn, L. I.; A. A. Pope, Farmington, Conn.; R. H. McCarter Potter, Andover, N. J.; John S. Phipps, Westbury, L. I.; Robert A. Pinkerton (The late), Bay Shore, L. I.;

Mrs. Elliott F. Shepherd, Scarboro, N. Y.; H. McKay Twombly, Madison, N. J.; R. B. Van Cortlandt, Mt. Kisco, N. Y.; William K. Vanderbilt, Jr., Great Neck, L. I.; William C. Whitney (The late), Westbury, L. I.; Robert Graves; Mrs. Frank Gray Griswold, Roslyn, L. I.; Jamestown Exposition, Norfolk, Va.; Henry Barton Jacobs, Newport, R. I.

LANDSCAPE ARCHITECTS

Olmstead Brothers, Brookline, Mass.; Guy Lowell, Boston and New York; Warren H. Manning, Boston, Mass.; Rollin S. Saltus, 9 East 41st St., N. Y.; Nathan F. Barrett, New Rochelle.



Old Arborvitae Hedge moved from our Nursery for Mr. J. S. Phipps, Westbury, L. I., in January, 1907. The kitchen wing is screened, and therefore leaves the symmetry of the house undisturbed



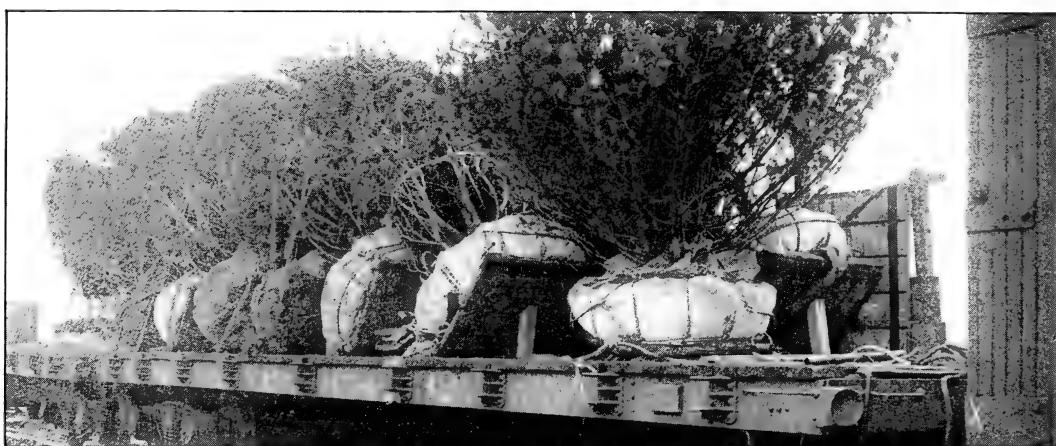
Large White Pine and White Spruce moved for Mr. Clarence H. Mackey, Roslyn, L. I., in 1902. These screen the freight yard, hotel and sheds of the village. These trees when moved were 16 to 18 feet high, and have since grown rapidly. We have hundreds of similar trees ready for delivery.



Unparalleled opportunity to buy a beautiful old hedge equal to the Yew hedges of England. Why build a wall around a formal garden? This *Hemlock hedge* is over thirty years old. It is 12x12 feet, solid and dense and 400 feet long. It is prepared for moving by tree-mover and shipment by rail. We have other Hemlock hedges of smaller size.



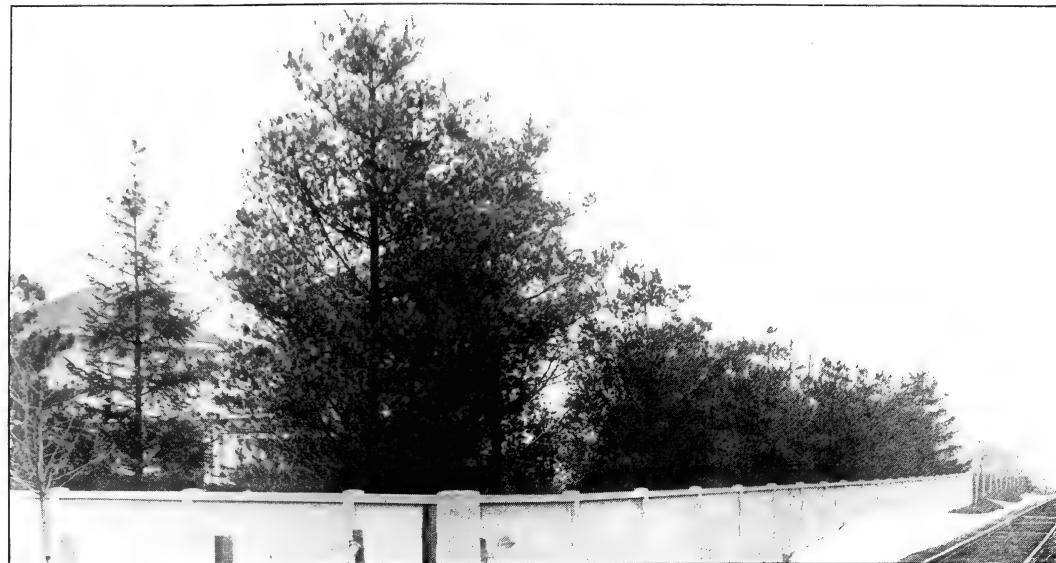
These are the wild White Pines we have root-pruned to prepare them for moving. They are 50 per cent wider and denser than usual. In other regions we have root-pruned 25 carloads of White Spruce, 10 of Red Pine and 8 of Hemlock. It is an economical, sure way to save ten to twenty years. Order for August, September, or winter moving.



A carload of White Pines, about twenty-five trees 12 to 18 feet high. Note how the long, flexible branches tie in and how the root-pruning permits a ball small enough for close packing. We have shipped 30 carloads and have had no failures.



Planting two White Pines 24 feet high. The heavy ball is easily rolled into the hole. We have developed the appliances and trained our men for economically moving these large trees. Are they not the best for you to employ?



A carload of these Pines, planted three years ago, effectually shuts out the passing trains and the view of the trolley bridge. On the other sides rows of houses and sheds are screened with Pine, Hemlock, Blue Spruce, Fir and Cedar up to 30 feet high. Residence of Mr. Robert Graves, Mineola, L. I.



Although we have hundreds of trees 20 years old that have grown in the nursery since infancy, it is not possible to keep up the supply that way. Here are White Pines 20 to 27 feet high, part of 13 carloads brought to the nursery in 1908. They are ready for delivery any time of the year.

Landscape Department Discontinued

The making of plans for grading, roads, location of buildings and extensive planting, has been discontinued since June, 1909, when Mr. H. T. Patterson, the head of that department for eight years, established an independent office.



The second season with large trees moved by Hicks Tree-Mover. Residence of Mr. H. McK. Twombly, Madison, N. J. *Weeping Silver Linden*. Note the dense and luxuriant growth. Size when moved, about 35 feet high and broad

Deciduous Trees



THE essential things that planters want are economical immediate results and best permanent results; both large and small trees that thrive, because they fit the various conditions of climate and soil:—two things never so thoroughly attained before.

An enthusiasm for good trees, together with a willingness to wait twenty years or more for them to grow, has resulted in handsome, large specimens which save the purchaser many years. "Burn it," is the customary rule when a tree is over 15 feet and not sold, because it is too large to box and ship. At Westbury Nurseries such trees were planted 10 to 20 feet apart, trained for successful transplanting, and encouraged to develop into perfect specimens.

An asset of greatest value to our customers is our knowledge of the botany of Long Island and the reasons for its distribution. They are climate, geology, soil, water supply and cultivation. Conditions vary within a few yards.

There is satisfaction to the tree and to all who behold it when it has been selected to fit its environment. This we will help you to do.

Andromeda • Sorrel Tree

Andromeda arborea. Slender and graceful as a birch, it can fill a narrow corner or go among the shrubs. The flowers are its crowning glory; long, curving racemes like drooping bouquets of lily-of-the-valley in midsummer when no other tree is in bloom. It is the first tree in autumn from which to pick a spray of carmine foliage. Plant this tree if you want to know one of nature's gems. Mix it with dogwood in the woodland borders, for it will be as harmonious here as in Virginia, where it is native.

Ash • Fraxinus

White. *Fraxinus Americana*. A tall, vigorous tree, growing in the shape of the Sugar Maple or Tulip Tree. A good street tree and especially valuable for groves on moist soils. This and the English Ash are good straight trees, and we recommend ours for real estate subdivisions where a cheap tree is wanted.

English. *F. excelsior*. A tree closely resembling the White Ash.

Beech • Fagus

English, or European. *Fagus sylvatica*. One of the few European trees perfectly at home here. In a grove of trees the eye rests with pleasure on the Beech. Its spirited outline of sharp-pointed branches relieves the dark, shadowy center. A tree with strength and grace in every line.

For screen planting, a grove of low-branched Beech, Hornbeam, Linden, Oak, Dogwood, Birch and Pine are more efficient and more dignified than the usual shrub border.

Rivers' Purple. *F. sylvatica*, var. *purpurea Riversii*. Deep purple in spring, changing to dark green. This and the Purple Norway and Japanese Maples are the best of the purple-foliaged trees.

Fern-Leaf. *F. sylvatica*, var. *heterophylla*. In the older Newport gardens the Fern-Leaf Beech is evidently the most highly prized tree. When carefully kept from crowding, it is as graceful as a great fern.

With its delicacy there is no weakness, but a wonderful beauty of lights and shadows between the sharp-pointed spray. Knowing that its value would be appreciated, we have grown a stock of good specimens.

Beech, continued

Weeping. *Fagus sylvatica*, var. *pendula*. In Flushing there is a specimen that forms a tent 70 feet in diameter,—the pride of the place. A row of them would make a magnificent covered walk, and some large estate can make itself famous thereby. As an individual, it is a grotesque and solid pyramid of waving branches.

American. *F. ferruginea*. Native over a large part of Long Island, this noble tree is not so often planted as it should be. Its smooth, gray bark, never furrowed with age, makes it an attractive and cheerful object as it illuminates the wood.

Birch • Betula

White, or European. *Betula alba*. The most commonly known species, and one extensively planted. It has a slender trunk, clothed with white bark. We offer low-branched specimens, 30 feet high.

Canoe, or Paper. *B. papyrifera*. The white bark of this tree was used by Indians for canoes.

Cherry, Sweet, or Black. *B. lenta*. This makes a tall, broad-spreading tree, of vigorous health. It has a smooth, reddish brown bark. We recommend our low-branched specimens for mass planting with Pines and shrubs.

Catalpa

Western. *Catalpa speciosa*. The large Catalpas in the illustration on page 14 will give immediate and beautiful results as shade trees and tall mass



Fern-Leaf Beech on the lawn of Mr. Chas. Steele, Westbury. It is a pleasure to rest the eye on the lights and shades



The native *White Birch* (*B. populifolia*) is a graceful tree, quick to grow and sure to thrive in ground wet or dry. With pines, cedars and other evergreens they make beautiful groups. They help evergreens to grow in exposed places,

planting. They are 20 to 30 feet high, with symmetrical tops. The Catalpa is a strong, vigorous tree, free from fungous or insect attacks. The leaves are large and the twigs wide apart, giving the tree an unusual largeness of detail. In flower it is the most showy tree. It is taller and straighter than the old "Smoking Bean Tree," or Southern Catalpa. These large Catalpas can be transplanted later in spring than most other trees, often as late as May 15.

C. Bungei. *C. bignonioides*, var. *nana*. Bay Tree Form. For formal gardens and terraces this is used for the same effect as the expensive and tender Bay Tree, and costs much less. *Catalpa Bungei* standards are made by grafting the dwarf Catalpa on a tall stem and training into symmetrical form. It grows vigorously, forming a compact, globular head of large, overlapping leaves.

Shrub Form. See under Shrubs, page 55.

Cherry • Prunus

Those who know the Flowering Cherries go into ecstasies over their flowers. There is good reason for the Japanese making pilgrimages to the cherry blossoms and hanging poetry upon their branches.

Pink Double-flowering Japanese. *Prunus Pseudo Cerasus*, var. *Sieboldii*. This has flowers like a beautifully frilled carnation.

Japanese Weeping Rose-flowered. *P. pendula*. This is like a delicate pink veil suspended in mid-air. The single flowers appear about a week before the Peach and are therefore welcomed with the first spring flowers.

Wild Black. *P. serotina*. The Wild Black Cherry, which has a grape-like bunch of fruit in August, is one of the healthiest foliated plants for seaside planting and an excellent drought resister. It is despised by farmers, for it first shows their neglect by growing up along the fences. It is a big round bush or tree.



These big, old *Catalpas* are offered at low prices. They are strong, healthy, broad and shady. With Silver Maples, they will give the most foliage for the expenditure of any tree we offer.

Chestnut · *Castanea*

American. *Castanea Americana*. This is an important timber tree of Long Island; in its maturity a majestic tree remarkable for the breadth and depth of its shade.

A serious fungous disease is killing the Chestnut trees in the forests of Long Island. It frequently kills 20 feet of the top or may work lower down on the trunk. It starts from a spore in a crotch or wound which sends out mycelium or threads of the fungus penetrating the bark next the wood. In a few months it girdles the branches and the leaves turn yellow and drop. A tree apparently healthy in June may be half-dead in August. The fungus produces spores in orange pustules or jelly horns on the dead bark. There is no treatment known, except to cut off affected branches and cut out dead bark on the trunk, and larger branches before they are girdled. Cut an inch or more beyond the edge.

In similar work on pear blight in California, it is advised to disinfect tools and wound with corrosive sublimate, one to one thousand. This remedy, painting the cuts with tar, and spraying with fungicides, have not been thoroughly tested. The cut-

American Chestnut, continued

ting is practical on isolated trees, but in the forest is very expensive.

Dr. Haven Metcalf, Division of Forest Pathology, United States Department of Agriculture, is experimenting along these lines in the young orchard of Mr. R. Dudley Winthrop, Westbury Station, L. I. In this orchard and that of Mr. Charles R. Steele, and in our Nursery, he finds the Japanese Chestnut immune.

The disease is new to science. Dr. Murrill, of The New York Botanical Garden, Bronx Park, named it in 1906, *Diaporthe parasitica*. One hope is that, like many other plagues, it will go in waves and, later, largely disappear.

It may be a blessing in disguise. On many Long Island private estates the woodlands will be more beautiful if gradually thinned out, according to the principles of landscape forestry described on page 4. Ninety-nine per cent of owners have not the knowledge, imagination and courage to do it. Now the diseased trees have to be cut, and the Oak, Hickory, Tulip and Dogwood will have a chance to develop into broad, handsome trees.

Cut the trees before they rot. Take them to a saw-mill, or get a portable saw-mill to cut them into framing timber or other lumber. Show that Long Island is not entirely dependent on imported lumber. There is also a market as telephone poles or cord wood. Felling trees and dragging out logs does some damage to other trees, but it soon disappears.



The *White Dogwood* is one of the best for planting by the hundred. The broad palms of foliage make a picturesque outline with deep shadows.

Chestnuts, continued

Japanese. *Castanea crenata.* No more luxuriant tree has come to us from Japan. It has shining leaves, and is full and round, foliated to the ground. The question is sometimes asked, "Can I plant Cherry, Peach and Pear trees in the lawn, and have them as ornamental shade trees?" Yes, but cultivation is better for them and their foliage is not certain to remain healthy. With nut trees it is advisable. Plant fifty Japanese Chestnuts instead of Deutzia, Spirea, Snowball, etc., in the shrub border, and they will make a denser screen of handsome foliage, always healthy. As a specimen lawn tree, it will make a sturdy little tree 20 feet high and equally wide. The nuts begin to ripen several weeks before the American. In Japan and Europe the Chestnut is a staple food. Plant Japanese Chestnuts and the Chinquapins in quantity to get nuts quickly as they bear in two or three years. The nuts are an inch in diameter, or larger; are good raw and excellent cooked, but not equal to the American in flavor.

We have grown a large quantity which we offer at low rates. Now that the American Chestnuts are dying, these should be extensively planted. See under Nuts.

Chinquapin. *C. pumila.* A hardy shrub, bearing a profusion of sweet little nuts in early September.

Dogwood • Cornus

White - flowering. *Cornus florida.* The White Dogwood has the most showy flower of the native small trees. It thrives in the open lawn or in the shady forest where its large white flowers, arranged in horizontal groups, illuminate the dark nooks early in May. All summer its foliage is dense and healthy, and its red leaves and scarlet berries mark the first changes of autumn. Plant Dogwoods 8 to 12 feet apart among the taller shrubs. They make the best border to feather down the edge of newly cut forest. Give them more sunlight, and they will bloom profusely. In thinning thick woods for landscape forestry, leave groups of Dogwood, even if small and crooked. Plant the White Dogwood with the White Pine, White Oak, Tulip, White Birch, and you have a group that grows naturally together.

Red-flowering. *C. florida*, var. *rubra*. A beautiful little tree destined to have a wider popularity. It is a gem worthy to rank with the Magnolias. New and rare is, in this case, synonymous with good. Plant a few of these and the Japanese Dogwood, and use them to graft in April, or bud in August on the wild Dogwood in the woods. A long step will then be taken in solving the problem of how to beautify the woods with harmonious planting.

Japanese. *C. Kousa.* Ignorance of its beauty is the only excuse for not planting this little tree. It is the counterpart of the White Dogwood in foliage and, therefore, harmonizes with the same surroundings. The chaste beauty of the white star-shaped flowers thickly covering the dark foliage surpasses any flowering tree of its season, which is a month later than any other.

We have a large stock which is offered at low rates to introduce it.

Elm • Ulmus

American. *Ulmus Americana.* No tree of temperate climates exceeds the Elm in gracefulness and majesty. It likes a moist situation, but it will grow on any good soil. We have trees up to 55 feet high, with spread of roots and tops of 30 feet, ready for successful transplanting.

Weeping. *U. Americana*, var. *pendula*. The rapidity of growth of this variety is surprising, often 7 feet per season. It is a healthy, tall tree, open in form, with wide arched streamers, which



The Japanese Chestnut will quickly make a broad, rounded and permanently healthy mass of foliage of this form and size. It fruits early and abundantly.

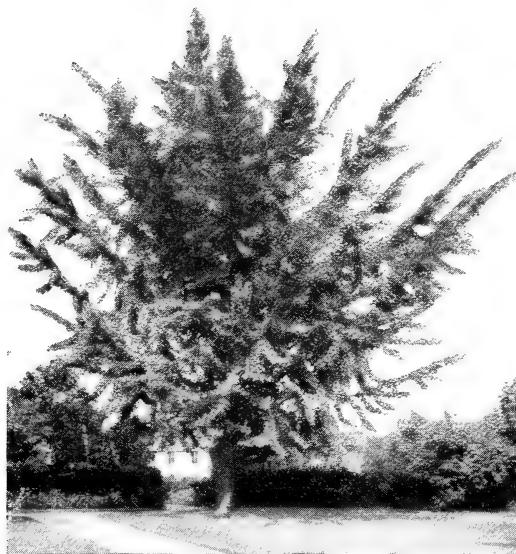
make a graceful outline against the sky both winter and summer. If the situation calls for a tree to vary the solidity of ordinary trees, plant the Weeping Elm. There is nothing abnormal or depressing in its appearance.

Ginkgo • Maidenhair Tree

Ginkgo biloba; syn., *Salisburia adiantifolia*. This tree is destined to have many admirers when old specimens become known. In maturity it loses the ungainly awkwardness of growth and makes a handsome individual in pleasant contrast to ordinary trees. Its nearly complete immunity from insect and fungus is unique. Storms do not break its branches, and it gives every promise of living 1,000 years here, as in the Japanese temple gardens.

Hickory • Hickoria; syn., *Carya*

Mockernut. *Hickoria tomentosa.* A big, square-shouldered, long-lived tree. On the drier parts of Long Island this and some of the Oaks are the largest trees.



Ginkgo at Great Neck, L. I. This has passed the lank and gawky youthful stage, and gives promise of reaching the dignity and grandeur of the Cedar of Lebanon. (See page 15.)

Hickory, Mockernut, continued

many situations it will, in a few years, be more satisfactory than the quicker trees.

We have a large quantity of young trees from local seed that should be planted among trees and shrubs and in Pine groves for permanent effects. It is a sturdy tree when small, and worthy.

Shellbark, or Shagbark. *H. orata*; syn., *Carya alba*. This is a native at Glen Head.

Bitternut. *Carya amara*. A tree of graceful, Elm-like form, narrow leaves, yellow buds and nuts as puckery as Persimmons.

Hornbeam • *Carpinus*

American. *Carpinus Americana*. The Indian name, Little Beech, accurately describes it. The leaves are smaller and denser than the Beech. It is as useful as an undergrowth as the Dogwood.

European. *C. Betulus*. This is excellent for screens and hedges. We offer a fine stock, suitable for this purpose. The russet leaves remain on all winter. It stands pruning well, making an impenetrable, stubby growth thick to the ground. It can be used in mass planting with shrubs, or will grow up to a wide Beech-like tree; vigorous and healthy.

Horse-Chestnut • *Aesculus*

Aesculus Hippocastanum. If we except the rarer Magnolias, this is the most magnificent flowering tree. In deep, cool soil, where the Newtown Pippin apple thrives, it keeps good foliage all summer. Elsewhere on Long Island the leaves become rusty by midsummer, but it is handsome enough in its luxuriant foliage and beautiful flowers to atone for that. Do not use it as the principal tree on a dry subsoil.

Dwarf. *A. parviflora*; syn., *macrostachya*. See under Shrubs, page 58.

Judas • *Cercis*

American. *Cercis Canadensis*. Red Bud. A small tree, with glossy, heart-shaped leaves. In early May, when the Dogwood is in bloom, the branches are closely wreathed with magenta-pink blossoms.

Japanese. *C. Chinensis*. See under Shrubs, page 60.

Kentucky Coffee Tree

Gymnocladus Canadensis. A giant among trees, large in all its parts. Not valuable on Long Island except on heavy or moist soil. It has leaves 2 feet long, divided like the *Aralia spinosa*.



Hornbeam Hedge about service court at residence of Mr. Babbott, Glen Cove. We have a large quantity of hedge to quickly make this effect



There is probably not another *block* of *Lindens* so well fitted for lawn or avenue. They are broad, low and symmetrical

Koelreuteria • Varnish Tree

Koelreuteria paniculata. A healthy tree of medium size, with showy panicles of lemon-colored blossoms in July, when the tall shrubbery and woodland borders are in need of flowers.

Larch • Larix

European. *Larix decidua*; syn., *L. Europaea*. Its beauty is most prominent in April and May, when the tender green foliage comes out two weeks ahead of other trees. It has the form of its relative, the Spruce, but drops its foliage.

Japanese. *Pseudo-Larix Kämpferi*. This is a noble, broad tree, with picturesque outline, resembling its near relative, the Cedar of Lebanon. Include a few when covering a hill with Pines and Oaks. It is called the Japanese Golden Larch, from its autumn color.

Linden • Tilia

In human nature there is a strong appreciation of the symmetrical and the solid. While this may not be the highest form of beauty in a tree in all places, the demand for it exists, especially in formal surroundings. All the Lindens have an ovate or egg-shaped form, but vary in their solidity of texture and depth of color, and healthfulness of foliage.

Silver. *Tilia tomentosa*; syn., *T. argentea*; syn., *T. alba*. White Linden. In symmetry of form it is unsurpassed. The foliage is dark green above and silvery white below, and is retained until late autumn.

There is a pair at our entrance, planted about twenty-eight years ago, that, without pruning, are as symmetrical as two eggs.

We have been to considerable trouble to work up a stock suitable for entrance avenues and lawn planting.

Spectabilis. *T. tomentosa*, var. *spectabilis*. A variety of the above, with large leaves, green on both sides. It, therefore, resembles the American Linden, but its foliage keeps in better condition. It is a vigorous, handsome tree.

Linden, continued

Weeping Silver. *T. petiolaris*; syn., *T. argentea*, var. *pendula*. This is not weeping in the sense of the Weeping Willow, as only the tips of the branches arch downward in the heavy luxuriance of their young growth. It makes an ovate and beautiful tree, rearing its crown as high as any and, like many vigorous trees, the lower branches sweep the ground and enclose one of the pleasantest outdoor retreats. We have specimens 15 feet broad, with foliage to the ground.

Small-leaved European. *T. ulmifolia*; syn., *T. microphylla*. A dense, ovate tree, whose smoothness of outline is formed by the closeness of the twigs and the small size of the leaves. The foliage is perfectly healthy. We have trees up to 25 feet in height.

We have a block grown 10 feet apart with the tops trained by a form to a uniform ovate shape. They present a unique opportunity to save half a dozen years in developing beautiful avenues, lawn specimens, or low-branched trees for screens. There are on the market several other European Lindens that have proven of little value because they are affected by a fungus, and drop part of their foliage in July.

American. *T. Americana*. Basswood. A large tree, with large, heart-shaped leaves. It prefers moist, rich soil, and without it may have rusty leaves in late summer.

Liquidambar • Sweet Gum

Liquidambar styraciflua. Bilsted. A most beautiful native tree, of the shape of the Tulip Tree or Sugar Maple. In the autumn it assumes very brilliant scarlet, orange and bronze colors. It should be included in groves, on both upland and damp soil, or planted as a specimen lawn tree.

Locust

Honey. *Gleditschia triacanthos*. We recommend this highly for seaside planting on sterile soils.

Magnolias

The Magnolias like Long Island and maintain good health here. Therefore Long Islanders should plant them extensively, not as single specimens, but in groups and belts as other trees and shrubs are planted. The reason they like Long Island was discovered by Dr. Asa Gray, the famous botanist. Magnolias are native of only eastern North America and eastern Asia. They once inhabited Greenland, Iceland, etc., and were driven south during the glacial epoch in these two regions because of their similarity of climate. Magnolias have been rare, high-priced and difficult to get from nurseries in quantity, and reputed difficult to transplant. We have changed all this. We determined to have a plenty, and collected large quantities of seed from the magnificently complete collection of the late Charles A. Dana, and elsewhere. Our stock is frequently transplanted and root-pruned. Therefore they have a close mass of fibrous roots and can be economically moved with balls of earth. They are sure to live, grow vigorously, keep in good foliage and furnish a wealth of beautiful flowers and showy red seed vessels every year.

The landscape grouping of Magnolias is not difficult. They are rounded in form, full at the base, and as harmonious in foliage with ordinary planting as Dogwood, Viburnum, Golden Bell, Privet, Beech, Linden, Sugar Maple, Pin Oak and Tulip Tree. The exceptions are the large-leaved species,—*Macrophylla*, *Tripetala*, *Hypoleuca* and *Frazeri*, which have tropical foliage and can be planted in parts of the lawn dedicated to unusual plants, or used to decorate, by contrast, the borders of the woodland and swamp.

Who will be the first to have a Magnolia and Azalea garden, or to transform a pond or stream into a Water Lily garden surrounded by a bower of beauty, by planting Magnolias around it?

Early Spring-flowering. March to May. Native to Asia—

Hall's, Kobus, Yulan, Purple.

Hybrids of the last two—*Soulangeana*, *Alba superba*, *Alexandria*, *Speciosa*, *Lenne*.

June-Flowering—

Umbrella, Large-leaved, *Hypoleuca*, *Fraser's Parviflora*, *Watsoni*, Cucumber, Sweet Bay.



Sweet Bay Magnolia, a beautiful flower that you can have in quantity at no greater cost than ordinary shrubs. They appear for a long time in early summer.

July- and August-flowering—

Parviflora, Purple, *Lenne*.

Trees—

Cucumber, Kobus, Umbrella, Large-leaved, *Hypoleuca*.

Shrubs—

Hall's, Sweet Bay, Yulan, *Soulangeana*, *Alba superba*, *Alexandria*, *Speciosa*, *Lenne*, *Parviflora*, *Watsoni*.

Big Tropical Foliage—

Large-leaved, Umbrella, *Hypoleuca*, *Fraser's*.

Abundant Ornamental Fruit—

Sweet Bay, Umbrella, Cucumber, Kobus, *Frazeri*.

Feeble Growers—

Parviflora, *Watsoni*.

Tender—

Grandiflora (Southern Evergreen Magnolia), Purple (slightly tender), *Lenne* (slightly tender).

Semi-Evergreen—

Sweet Bay.

AMERICAN SPECIES

Sweet Bay. *Magnolia glauca*. Laurel Magnolia.

This, especially, should be planted in large groups; it grows better and looks better so. In winter it keeps part of its foliage and it is the brightest green of the broad-leaved evergreens. It will make a healthy bush or small tree 8 to 15 feet high.

The flowers and foliage most closely resemble the famous Southern Magnolia, because it is most closely related to it. The graceful, globular, cup-shaped flowers are delightfully fragrant. Color cream-white. They are sold in June and July in large quantities by the flower venders of New York, who bend back the petals to make the flowers look larger.

It is native to Long Island between Speonk and Westhampton. Professor Hollick, of the New York Botanical Garden, uses this and several other species to demonstrate that Long Island, New Jersey, Block Island, Nantucket and the Cape Cod region, were once connected. As plants of the southern sandy coastal plain flora moved north on the retreat of the ice sheet, they came up this costal plain. They could not travel through the flora of the rocky upland of northern New Jersey and Connecticut, therefore,



Our stock of *Umbrella Magnolias*, showing mass of fibrous roots, the result of last year's root pruning

Magnolia, Sweet Bay, continued

they traveled on land which is now under water, for Long Island is sinking at the rate of 1 foot per hundred years.

This Magnolia can be used for seaside planting with the Holly, Cedar, Virginia Creeper, Wild Cherry, Bayberry and Pitch Pine. It can also be used on the upland in shrub borders and near the flower garden.

We offer it at low rates and recommend its purchase in large quantities, for a stock of it is not raised by nurserymen every year and, therefore, cannot be offered at such low prices annually.

Umbrella. *M. tripetala*. This has large, tropical foliage, the leaves being $1\frac{1}{2}$ feet long and 8 inches broad. It grows rapidly to form a medium-sized tree, with broad head, but it can be appropriately used in the background of large shrubberies for mass planting, spacing it about 10 feet apart. The luxuriance and large size of the foliage makes an agreeable contrast to ordinary foliage. While there is some natural scenery with which it might be inharmonious, it will always be so rare as to avoid the danger of being commonplace.

The flowers are pure white and about 8 inches wide, and appear in the middle of June. The fruit is the most showy and ornamental of all the Magnolias. It is a brilliant red cylinder, about 5 inches long and 2 inches in diameter. The scarlet seeds hang out on silken threads.

Magnolia, Umbrella, continued

We have worked up a stock of large trees, 8 to 12 feet high, which are straight, symmetrical, and root-pruned to transplant successfully.

We recommend them for planting on upland, but especially for moist situations. Those who own land bordering the streams of Long Island have herein an immense opportunity to immediately produce a beautiful group, for they can be planted in among the existing wild growth and will take care of themselves. They have run wild about a spring at Brookville, near Oyster Bay.

Large-leaved. *M. macrophylla*. This has the largest flower and the largest foliage of any plant hardy in this region. The blossom is as graceful as a classic vase. The pure white petals are thick and firm in texture and open out as broad as a man's hat. Our parent tree is 25 feet high, and perfectly hardy. It is suited to the situations mentioned for the Umbrella Magnolia, but is a handsomer tree in every way except the fruit. It is very rare in cultivation. It blooms about the first of July, and the only defect is that the rose-bugs seem intoxicated by its strong perfume and fill its beautiful cup. To procure an undefiled blossom, it is necessary to cover the bud with a paper bag.

Connoisseurs who wish to have the rare and curious should include this.

Fraser's. *M. Fraseri*. This resembles the Umbrella Magnolia, but is a more slender tree.

Cucumber. *M. acuminata*. Unlike the three above, this appears to be just an exceptionally handsome ovate tree of the Tulip tree type.



Large Silver Maples growing 15 feet apart in our Nursery. Single leaders, ovate tops. Offered at bargain prices because they are crowding smaller stock.



Yulan Magnolia. The white chalice has the purity of the Madonna Lily

ASIATIC MAGNOLIAS

Magnolia Yulan; syn., **conspicua.** This is the species which has contributed most to the decoration of gardens in early spring. It holds aloft its pure white chalice, unmindful of April snows. It is a tall shrub of perfect hardiness and good foliage throughout the summer.

There are some old plants 30 feet high about Flushing and the Bedford section of Brooklyn. Later, it was not much planted because of the greater ease of propagating its hybrids. It is rare and high-priced, but should be included in collections. In China it symbolizes candor and beauty.

Purple. *M. obovata gracilis;* syn., *purpurea gracilis.* This is a broad shrub, about 8 feet high, with dense, healthy, dark green foliage and deep red flowers in May and scattering throughout the summer. It is hardy along the south shore of Long Island, but here it occasionally winter-kills when young, because of the late soft growth.

We recommend its extensive planting in shrubberies and along the border of woodlands because of its good foliage masses, dense at the base.

The species *Obovata*, of which this is a variety, has larger flowers of tea-cup shape, and is the parent, with the Yulan, of the five following hybrids, which are intermediate in color and all bloom in April before the leaves.

M. Soulangiana. This has white flowers, with a shading of red at the base of each petal on the outside. It is what most people think of when they speak of Magnolias in the North. It forms an exceptionally dense

Magnolia Soulangiana, continued

and symmetrical shrub of 15 feet in diameter when old. There are few large lawns where an appropriate place cannot be found for it. We have a stock of large plants that have been growing here a number of years and are valuable for immediate results.

M. alba superba. This most closely resembles its parent, the *Magnolia conspicua*, and is nearly pure white.

M. Alexandria. Large white flowers, shaded bright red.

M. speciosa. The outside of the flower is rose-colored, the inside pearly pink.

M. Lenne. This shows most strongly the colors of its red-flowering parent. The flower is a big, broad tea-cup-shaped blossom about 4½ inches high, deep red outside and lighter within. We have noticed some bushes winter-killed about a foot at the tops, otherwise this set of hybrids is entirely hardy and healthy on Long Island.

Hall's. *M. stellata*; syn., *Halleana*. Hall's Star Magnolia. In the opinion of many, the gem of the family. It has heretofore been the most rare in nurseries, and its high price has deterred planters. After the hard winter in 1903-04, it bloomed so late in April that the frosts did not prevent its setting a large quantity of seed. We secured all possible, and now have over a thousand plants. We doubt if they will be offered for a long time more abundantly or cheaper.

Who will be the first to make a garden hedge of them? The compact and even growth will render unnecessary the desecration of shearing. It is the first Magnolia to flower, and the school children delight to pick this and the Pussy Willow before the Golden Bells bloom.



Magnolia Stellata is the most beautiful harbinger of spring

Magnolia, Hall's, continued

The flower is entirely different from other varieties, as the illustration shows. It is as worthy of admiration as the Water Lily and is not dissimilar.

Its name comes from the missionary, Hall, who recognized the climate similarity and brought back a number of beautiful plants and had to beg various nurserymen to take them. The endeavors of Hall and other enthusiasts resulted in the introduction of the most beautiful and healthful plants for the parks and gardens of the eastern United States, as Chinese Azalea, Japanese Barberry, Deutzia, Eleagnus, Exochorda, Golden Bell, Upright Honeysuckle, Hydrangea, Japanese Judas, California Privet, Japanese Snowball, several Spireas, Weigela, *Euonymus radicans*, *Clematis paniculata*, Wistaria, Hall's Honeysuckle, Japanese Ivy, Crimson Rambler, Memorial Rose and Rugosa Roses, Japanese Anemone, Japanese Lilies, Japanese Plum, Kiefer Pear, Japanese Chestnut, Japanese Dogwood, Ginkgo, Japanese Maple, Japanese Poplar, Styx, and many others.

M. Kobus. This promises to make a tree as hand-

Magnolia Kobus, continued

some as a Small-leaf Linden. We have symmetrical trees 8 feet high. It is said to have flowers like the *Magnolia stellata*, but it has not yet bloomed, while the latter blooms profusely when but 2 feet high.

M. hypoleuca. This is a big, broad tree, with leaves resembling the Large-leaved Magnolia, which show silvery white beneath when turned by the breeze. The foliage remains solid and unharmed by drought or severe winds. The flowers are about 9 inches wide, creamy white, with a crown of brilliant crimson stamens in the center. We recommend it highly. June.

M. parviflora. This is probably the least known of all the Magnolias, and, to our mind, the flowers, if shown in the florists' windows, would create as great a sensation as orchids, if these were entirely new. They are alabaster-white cups, about 3 inches in diameter, with the purest red stamens inside. It starts to bloom in June before the rose-bugs defile it, and continues in July and August after they have gone.

M. Watsoni. This resembles the last, except that the flowers are slightly larger.

Maple • Acer

"I want trees" is the first thought, and the second is "plant Maples." This universal popularity is founded on certainty and quickness of growth, dense shade, symmetrical form, and brilliant autumn colors, for all these qualities are included in the Maple family. We offer the biggest and best Maples on the market. They are skillfully trained by new methods to the best possible condition. While Maples are tenacious of life when poorly grown and the roots cut short, when grown and transplanted our way, they grow luxuriantly and severe pruning is not necessary. You buy a big, broad, symmetrical top, and you get it. Another tree with the same sized trunk, but with poor, coarse roots and crowded top, is comparatively worthless.

Norway. *Acer platanoides*. The spherical top and dense, dark green foliage distinguish this tree. Ability to take care of itself is a permanent characteristic. Like the Baldwin apple and the Concord grape, the Norway Maple has been long recognized as the safe variety to plant. It is the all-round, general-purpose shade tree. For those wishing to add greater variety, there are, fortunately, many other species, as Linden, Oak, Elm, available in our nurseries.

The points of peculiar excellence of our Norway Maples are, abundant fibrous roots, straight trunk, single leader, preventing splitting and permitting the tree to be trimmed higher, and wide, symmetrical top. It takes more room in the nursery to grow trees with wide tops and good roots, but the trees are worth the difference.

We offer trees with high heads for street planting, or low, broad tops for lawns. Ten, twenty or thirty years can be saved by planting these big Maples.

Silver. *A. saccharinum*; syn., *A. dasycarpum*. There is more foliage for the cost in Silver Maples than in any other tree. It is the best of the cheap, quick trees for most soils and situations. In late summer, after a drought, the Silver Maples will look well while the Carolina Poplars do not. Our stock is trained to single leader, which prevents splitting; dense, symmetrical, Linden-shaped tops, not liable to breakage by wind or ice, and abundant fibrous roots, which make them sure to live.

If your problem is to make a tall screen to stable or house, these Maples, 20 to 40 feet high, will do it satisfactorily. If an entrance drive is to be immediately shaded, they will form a graceful, Elm-like arch. The Silver Maple takes the



Norway Maples. After fifteen years of skillful growing, we have developed hundreds of these broad, symmetrical trees from ordinary 10-foot trees.



Silver Maples from our blocks of extra-sized trees supplied to the late Hon. Wm. C. Whitney, Old Westbury. We have a large quantity of trees of the same age, 18 years, that are trained to broad ovate tops and single leaders.

Maple, Silver, continued

place of the Elm on many of our roads, for the Elm does not reach its typical development on Long Island. If the problem is to shade a house or porch, these Maples, 20 to 40 feet high, will add the most comfort and beauty for the least cost. The Silver Maple is not fitted to parts of the Rockaway peninsula.

Wier's Weeping Cut-Leaf Silver. *A. saccharinum* var. *Wieri*. A variety of the Silver Maple, with long, gracefully curving branches.

Sugar, Rock, or Hard. *A. saccharum*; syn., *saccharinum*. The Sugar Maple is a tall, ovate tree, which thrives best on the deep soils on the north shore of Long Island and reaches its highest beauty on the rocky soils of New England and westward.

Scarlet, or Red. *A. rubrum*. A strong, Oak-like tree, beautiful and healthy in all situations. It is native to both swamps and uplands on Long Island. It has brilliant autumn foliage. We offer trees 30 feet high, suitable for massing or single specimens.

Mulberry · Morus

The Mulberries are large and wide-spreading, vigorous and rapid in growth, making beautiful shade trees.

New American and Downing's Everbearing. *M. alba*. Varieties cultivated for fruit, and also handsome broad shade trees.

Mulberry, continued

Russian. *M. alba*, var. *Tatarica*. A small tree of dense foliage, suited to large groups of shrubbery. It was introduced into the western states by the Russian Mennonites and recently the following variety was found.

Weeping. *M. alba*, var. *Tatarica pendula*. Teas' Weeping Mulberry. This is the best of the umbrella-shaped trees, such as Kilmarnock Willow, Camperdown Elm, Weeping Ash, etc. It grows 7 feet per year, and has healthy foliage of a rich dark green. The fruit is edible. The usual form is grafted on a stem 4 feet high, from which the branches droop to the ground.

It may be trained as a garden arch or pergola, or as a summer-house or verdant tent at the end of a garden walk, or as a children's play-house. We offer them trained as a summer-house with iron supports, from 5 to 8 feet high. Trained to a stake, its graceful sprays fall to the ground like a fountain jet.

We also grow it as a shrub, when it heaps up masses of arching branches 4 feet high and 8 feet wide, and best used for massing or edging shrubbery and for covering steep banks.

Paulownia · Empress Tree

Paulownia imperialis. A tall, broad tree like the Catalpa. Its large blue flowers, borne in panicles often a foot long, are not conspicuous, because of their height and resemblance to the color of the sky. Blooms in May. Fragrant.

Peach · Prunus

Double-flowering. *Prunus Persica*, var. *camelliae-flora plena*. Small trees covered in early spring, with a wealth of beautiful double blossoms; white, pink or crimson.

Pepperidge · Nyssa

Nyssa sylvatica. Sour Gum. To lovers of brilliant autumn colors this tree is a favorite. It is native to most of the Long Island forests. Its branches are horizontally arranged and the foliage small and glossy.



Weeping Mulberry, trained as play-house. The trees we offer are now five years older than when photographed



Pin Oaks supplied to Mr. J. Rogers Maxwell, Glen Cove, L. I. We have many of this height in the nursery

Oak • Quercus

More than sixty per cent of the Long Island forests are Oaks. Therefore, grow Oaks. There are eleven species of Oak native to Long Island. For every type of Long Island soil and for every class of moisture supply or climate exposure, there is a species. Trees raised from Long Island seed are adapted to Long Island conditions.

You want a border of foliage 10 to 30 feet high. It is not necessary to use Poplars and Willows because of their reputed quick growth. We offer Oaks up to 40 feet. If you have Poplars and Willows, plant Oaks between to come on for permanent trees. If you have a stretch of land too poor for lawn, or costing too much to make a good lawn, plant with Oaks and Pines and let it alone. They take care of themselves. Cut the grass once a year, or not at all. When they crowd, thin them out. It is the swamp, type or humid-climate type of tree and shrub, constituting the majority of nursery stock, which needs cultivation or mulch, water and fertilizer, to preserve its greatest beauty. To plant the small one- to two-year Oaks and Pines, etc., open a cleft by pushing down a long spade, put in the little tree, with the root down straight and 2 inches deeper than before, and pack the earth solidly.

You may have to cut through woods, leaving a raw edge of bare trunks. It needs rounding off and feathering down. Long Island's most harmonious foliage is Oak and Dogwood.

You may have a hill of abandoned land. A large number of building sites are of this character,—im-poverished farms, now patches of bare sand, Blackberries, Bayberry and Cedar. Nature's next step is to let the squirrels bring in a few acorns. When they bear, more nuts are planted. Nature is slow. Lead Nature. Do what Nature is going to do, but do it first. The thriftiest Oaks are often found in these patches of bare sand. Plant Oaks and plant them thickly. It is cheaper and better to let them occupy all the ground. In short, get forest conditions. Remember the rule of a famous landscape architect; "Plant thick, thin quick."

Forestry. Forestry must include largely the Oaks. Long Island forests produce almost no sawed timber, because the trees are sprouts from stumps and are rotten and feeble as they reach saw-log size. Trees from seed are sound and vigorous. The German forests are largely from the planting of small trees of the size we offer.

Have the satisfaction of starting a forest right, even if the assessment is too high to make it profitable. Let this forest teach you, and teach your friends and neighbors, that there is no mystery about growing

Oak, continued

forest crops. Invention cannot remove the necessity of forestry. Remove the mystery, lessen the fire risk, and capital and state will take hold of forestry. Stockholders in railroads, manufacturers and consumers will all be educated by your forest. An Oak, Hickory and Pine forest will give the highest beauty, because

they will be among the happiest, most luxuriant and healthiest trees. Despise not the little tree. It enables you to do big things at low first cost and interest. In eight years a grove of 1-foot trees and one of 6-foot trees will look alike. If you want a few trees 15 to 20 feet, that is another proposition. Plant big ones with good roots.

For seaside planting, some of the Oaks are the best of all. Their thick, leathery foliage stands the caustic salt spray and the grinding action of the sand blast. Their tough arms battle with the gale. Their long-reaching roots gather sustenance from the sand. If a great storm damages the foliage, they have the vigor to make a new, dense growth. The Black, Scarlet, Post, Scrub, and Chestnut Oaks should be included in seaside planting.

The windbreak value of Oaks is threefold. First, the leaves remain all the year on certain species, especially in the drier soils. Second, even with the species which drop their leaves, their thick, twiggy growth helps. Third, they help the Pines and Spruces, without being so thirsty as to rob them. Nature favors that partnership. On the prairie, this combination has made the best shelter belts.

If you want trees that will give the least trouble with insects, fungus, drought, winter-killing, plant the kind of Oaks that fit your conditions, and cut back three-quarters of the top. That is the secret of successful transplanting of hardwood trees.



Large Pin Oaks in Westbury Nursery, ready for mature results.
Trees over 12 in. diameter, 30 ft. high and 20 ft. spread

Pin. *Quercus palustris*. The Pin Oak has led the way in popularizing the Oaks, because it is easy to transplant. It is of symmetrical, ovate form, with lower branches gracefully spreading downward. It has a bright autumn color. It grows rapidly, sometimes 4 feet per year, and thrives on all Long Island soils. The illustrations show Pin Oaks 2 feet in diameter, growing vigorously ten years after we have moved them, showing that the idea that large trees fail is not based on our methods. Large Pin Oaks recover quickly from transplanting, and will often give a good shade the second year. In our Nursery are large quantities of broad Pin Oaks, 20 to 30 and 30 to 40 feet high, ready to shade your house, screen unsightly buildings, complete your home picture.

Red. *Q. rubra*. The big, gravity-defying, broad-spreading branches, sinewy as a pugilist's arm, show even on the young trees. Of course, the White Oak is the ideal and equals the European Oak of literature, art, and history, but the Red Oak will attain the same qualities earlier. It is well dressed with large, clean foliage that turns deep red in autumn and then falls off. Its growth is as rapid as the Norway, or Sugar Maple. A tree that will always do its work quickly and require no coddling, frequently making 3 feet of growth per year. We offer a good stock of trees recently transplanted.

Scarlet. *Q. coccinea*. Probably the commonest Oak tree on Long Island. Its foliage resembles the Pin Oak, but its lower branches are larger, stronger and spread upward. Its leaves turn to brilliant scarlet late in autumn, and in some soils they remain red all winter.

For windbreak and all-the-year screen, this leaf-retaining feature is of great value. If you do not trim them, the branches will remain thick and broad to the ground. In drought it thrives and keeps on growing when other trees stop.

Order 500 Scarlet Oaks and 500 Pines, plant 5 to 10 feet apart, and they will do more than five times the investment in shrubs.

Black. *Q. velutina*. The Black Oak is the closest relative and companion of the Scarlet Oak, and, by some botanists, considered a variety of the same species. The useful qualities of the Scarlet Oak apply to the Black Oak, with the addition that its thicker, more leathery leaves fit it to stand salt spray. The general appearance of the tree is big and sturdy, and next the surf it makes a low tree, pugnacious and broad-shouldered, with branches to the ground. Miles of sand dunes can be held by it if only they are started.

Post. *Q. stellata*. The polished black-green leathery leaves announce this a drought-resister. It is native on the bare, sandy hillsides or on the gravelly seashore. It makes a broad tree.

Oak, continued

White. *Quercus alba*. The white Oak, spreading its branches for nearly a hundred feet, possesses dignity and strength, representing the growth of over a century. What will it do in twenty years? Recall the 10-foot sapling you knew by the fence, as a child? Now it is 30 feet high and wide, strong and lithe, dignified, full of promise, never loses what it gains. Would you not rather have it than the quicker Poplars already rotting and toppling to the earth? If you want a monument for the future, plant a grove of White Oaks.

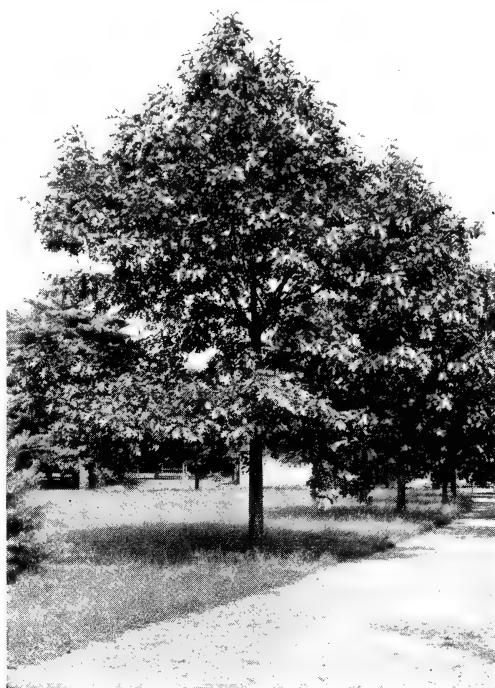
Chestnut. *Q. prinus*. The Chestnut Oak is native to two types of soil on Long Island; where drainage is excessive—the slopes of Cold Spring Harbor and similar valleys, and of the Rockaway peninsula. A large, handsome tree with chestnut-like foliage which turns to rich russet in autumn.

Dwarf Chestnut. *Q. prinoides*. An almost unknown comrade of the Scrub Oak. On the Hempstead Plains it makes a carpet a foot high and several yards wide, creeping by underground stems. It will make a delicate and graceful shrub of 5 feet. Plant in shrubberies and on dry banks.

Swamp White. *Q. bicolor*. The Swamp White Oak is a shaggy-barked tree, native to heavy land on Long Island. It is of the White Oak type, but grows more rapidly and is more upright. Its foliage stands city air.

Mossy Cup, or Burr. *Q. macrocarpa*. A tall, rugged tree with twigs thickly ridged with cork.

Scrub. *Q. ilicifolia*. The Scrub Oak need not be despised; the melancholy effect of the thousands of acres of it on Long Island is due to the forest fires which cause the even-topped growth, ragged Pines and poverty of soil. Its dense growth and drought-resisting qualities make it valuable for nurse-planting on dry banks. It will form a round or flat-topped bush of 10 feet.



Avenue of Red Oaks planted by us in 1905 on the Mineola Fair Grounds. They have outgrown some of the Maples, and already show the strong Oak character.



Residence of Mr. John L. Lawrence, Lawrence, L. I. In 1897 we moved in large Pin Oaks, Wild Cherry, old Boxwood and large Shrubs, giving immediately the setting its architecture required. The gardener tells with amusement of some curious passers-by, who inquired how old the house was, and refused to believe his statement, "It was a bare field three years ago."



English Oak on lawn of Mr. J. W. B. Van De Water, Hempstead, planted from our nursery about 12 years ago

Oak. continued

Laurel. *Quercus imbricaria*. The Laurel, or Shingle Oak, is a beautiful tree in all respects. The leaves are the shape of the Laurel, without lobes or notches, and of dark, lustrous color. Our stock is from a tree planted by the late Wm. C. Bryant, at Roslyn, L. I.

Black Jack. *Q. Marylandica*. In the driest gravel of Long Island this makes a symmetrical, round-topped tree of 40 feet, having the qualities of strength and rugged endurance, even when small, looking like a miniature old Oak. We recommend its extensive planting on very sterile soils.

Turkey Oak. *Q. cerris*. A tall tree, of good foliage, of value in arboreta.

Willow. *Q. Phellos*. The narrow foliage of the Willow and the habit of the Pin Oak combined, make this one of the prettiest ornamental trees. Our stock is from Philadelphia, and occasionally winter-kills. It is native on Staten Island, and we expect to get the hardy form later.

English, or Royal. *Q. pedunculata*; syn., *Q. Robur*. The trees we offer are from the seed of a tree planted by Isaac Hicks that has grown 40 feet high and 40 feet broad, 30 years from planting, and gives promise of attaining the qualities that have made this species famous in history.

We have a quantity of these trees that have been grown wide apart and have developed broad heads and strong, horizontal branches, and now show the Oak character. If you wish a group of Oaks, plant these for immediate effect. We offer them at exceedingly low prices. Plant between them some American Oaks, because they will be most sure to have permanently good foliage.

Persimmon • *Diospyros*

Diospyros Virginiana. It is not generally known that this fruit tree of the South is native here, forming a round-headed tree of healthy, dark and glossy foliage.

Phellodendron • Chinese Cork Tree

Phellodendron Amurense. This is a very promising tree, growing rapidly to broad-spreading form. It may be used for lawn or street purposes. We recommend it very highly. It resembles the Ailanthus, but is without its faults.

Plane Tree • *Platanus*

Platanus orientalis. Oriental Plane, or Sycamore. This tree is better than the well-known American Buttonball, being free from fungous diseases. It grows to a large, broad-spreading, symmetrical tree. The past severe winters have damaged the bark in some localities.

Poplar • *Populus*

Carolina. *Populus deltoides*, var. *Carolinensis*. The Carolina Poplar is the most commonly planted, as it quickly forms a tall tree. However, for most Long Island soil, it is a failure after a few years, and we know of no one who is pleased with it after ten or fifteen years. To do well, it needs rich soil, free from drought.

Japanese. *P. suaveolens*. We highly recommend this species for general planting on Long Island. In spring it comes out as early as the Larch; that is two weeks earlier than other trees, and it remains green later in the season than most trees. The foliage is thick like the *Rosa rugosa* and is equally healthy. The large specimens of this tree excite admiration from all who make their acquaintance. We believe we are the only nursery offering it.

We do not say it is the best tree, but it is the best Poplar, and is one of the best quick, cheap trees. Its roots penetrate deeply, and so it stands drought better than the other Poplars. Most important of all, it is free from the rust that half defoliates the Carolina Poplar and makes the suburbanite angry with the real estate company that planted them because they were cheap.

Lombardy. *P. nigra*, var. *Italica*; syn., *P. fastigiata*; syn., *P. dilatata*. The Lombardy Poplar has distinct characteristics, and may be used for landscape effect to vary the sky-line. It is ragged and short-lived on Long Island, and we do not recommend it for screen or mass planting, although it is frequently ordered for that purpose because of its rapid, tall growth.

For making a satisfactory screen, we have tall trees of better species, as the Silver Maple, Norway Maple and Pin Oak, which will keep dense foliage. If these grow too broad, they can be cut back at the sides, as in France and Holland.

Silver Bell, or Snowdrop Tree (*Halesia*)

Halesia tetrapetala; syn., **Mohrodendron tetrapetala**. A small tree, known because of the masses of white bells which cover it in May. The Silver Bell, the orange-flowered Styrax, the Dogwood and the Sweet Bay Magnolia make a beautiful group.

Thorn (Hawthorn) · Crataegus

Paul's Double Scarlet. *Crataegus monogyna*, var. *Pauli*. The brilliant intensity of color distinguishes this little tree from all others. Like the foregoing, it is valuable only for its flowers.

Cockspur. *C. Crus-galli*. This species is native on the most windy portions of the Hempstead Plains and edges of salt meadows. It is a picturesque tree, growing 10 to 20 feet high, with long, horizontal, sharp-pointed branches. The leaves are thick and glossy. In autumn the branches are covered with bright red haws.

We recommend it highly where a Hawthorn hedge is wanted. It should be used in large mass plantings of shrubs. The English Hawthorn has indicated its dislike to this climate, and is subject to San Jose scale.

Tulip Tree · Liriodendron

Liriodendron tulipifera. White Wood. This ranks with the White Oak and the White Pine as one of the noblest trees native of Long Island. It grows rapidly to a tall, symmetrical tree, which should be extensively used for lawn and avenue planting. It should be very carefully planted in the spring. The Tulip becomes the tallest tree in the forest, with a straight trunk, tapering as gracefully as the Ionic column in a Grecian temple. The foliage is healthy throughout the season, and the flowers, large yellow tulips in June.

Pyramidal. *L. tulipifera*, var. *pyramidalis*. This grows in a narrow column like the Lombardy Poplar. It is worthy of a trial.

Yellow-Wood · Cladrastis

Cladrastis tinctoria; syn., *Virgilea lutea*. A combination of the good qualities of the Beech and Locust. It has smooth, gray bark and bears long racemes of white flowers.

Willow · Salix

The Willow family is characterized by quick growth on ground too wet for many other trees, combined with ease in transplanting. It may be used for temporary planting on uplands. For the seaside, plant in thick, wide masses, i. e., groups 10 to 30 feet wide with the trees 4 to 10 feet apart.

Babylonian Weeping. *Salix Babylonica*. The well-known Weeping Willow.

Salamon's. *S. Babylonica*, var. *Salamonii*. A variety of the above, with more upright branches the ends of which are drooping. A rapid-growing and handsome tree.

Yellow, or White. *S. vitellina*. An upright-branched yellow-barked tree.

Laurel-Leaf, or Bay-Leaf. *S. pentandra*; syn., *S. laurifolia*. This can be used for the same purpose as the California Privet. It grows taller and more rapidly. Plant 6 to 10 feet apart to form a quick, tall screen. The leaves are broad, thick and glossy.

Walnut · Juglans

See, also, Nut Trees

Black. *Juglans nigra*. Among the Black Walnuts are found some of the most venerable and rugged great trees on Long Island. It likes good soil, about 10 feet above an underground stream, with plenty of room to develop. It will bear crops of nuts annually. The foliage falls in early autumn.

Butternut, or White Walnut. *J. cinerea*. Another useful tree nut that is native to Long Island. It grows about 30 feet high.

Japanese. *J. cordiformis*. The rapid growth and wide-spreading top of this species gives it ornamental value. The nuts grow in clusters and resemble the Butternut.

English. *J. regia*. The pride of several old Long Island homesteads is the English Walnut tree.



Norway Maple

Japanese Poplar

Pin Oak

Silver Maple

Lawn of Mr. Winthrop Burr, Lawrence, L. I., on a bare site near the ocean. Large trees selected from our Nursery



Residence of Mr. Stanley Mortimer, Roslyn, L. I. Planting of large evergreens by Hicks tree-mover. Cedars, Pines, Spruce, Fir and Hemlock up to 20 and 30 feet were moved, to separate the entrance drive from the sunken service court. There are groups of such evergreens at each end of the mansion, which take away the bleak, bare wind-swept appearance from the new house on the crest of the hill. Old Dwarf Boxwood on the left, with the English Ivy, completes the picture.

Evergreens

The question arises: What will evergreens do to enhance the beauty and value of my property? Every owner has ideals for the future development of his land. Do these ideals include a grove of Pine, a wind-break of Spruce trees, a Pine-forested hill or a valley with Hemlock-covered slopes? Have journeys to the northern mountains given memories of Balsam, Pine and Spruce that you would like to see reproduced near home? This can, in large measure, be accomplished. The evergreens of northern latitudes, as the Hemlock and White Pine, are native on Long Island; but the axe of the early settlers and the fires have nearly exterminated them, and it is necessary to plant to give our winter landscapes the beauty, interest and cheerfulness that the climate permits.

The utilitarian value of evergreens is but little understood. They have been regarded as the extravagant and isolated ornaments on the lawn. That is partly the fault of the nurserymen for not growing them in large quantities and offering them at low prices.

To aid in deciding what to order, we state the merits and limitations of each species. We offer evergreens in nearly every size, price and variety that can be used in this region. It remains for you to decide to what extent evergreens will help your property, and what size will suit your purposes.

For immediate results, we have the **largest-sized evergreens** on the market, and, what is equally important, have invented and constructed several types of tree-moving machinery for successfully moving large evergreens.

On the other hand, if **small evergreens** will best suit your purposes, we believe that we have the largest quantity that has ever been grown in the northeastern United States. It has heretofore been the custom to import small evergreens from Europe, but a long test has proven that most of the kinds native to Europe are not permanently hardy or handsome here.

If **medium-sized trees, from 2 to 5 feet high**, will best suit your requirements, we feel certain that no better trees can be grown than those here offered. Our stock has been trained to have abundant fibrous roots, and will be dug in a way to insure excellent results.

How many to order depends on the area to be covered and the distance apart. Evergreens love company. The mutual protection of a grove where one tree shelters another from the drying winds, adds to their beauty and usefulness. The individual tree will be much more dense in foliage when it is surrounded by a grove of other trees. "Plant thick, thin quick," is the summary of a discussion on this subject by a convention of landscape architects and park superintendents. Both parts of this rule are more important with evergreens than with deciduous trees. We have made it possible to plant thickly by offering evergreens in large quantities and at low prices, and our tree-moving inventions make it easy and safe to thin safely at the proper time, and utilize these trees for other planting or for sale. Before our method of tree-moving, it was customary to cut down and throw away such trees, because evergreens over 9 feet high were often thought too big to move successfully.

The distance apart will, therefore, depend upon how quickly you wish results and upon how windy the situation is.

For a screen belt, evergreens may be planted 5 to 12 feet apart. The group should be 15 feet wide,



Vista of tall *Red Cedars* moved by us on Hicks Tree-Movers in the Italian Garden of Mr. Stanley Mortimer, Roslyn, L. I. This vista leads to the Villa d'Este circle described on page 9. The ground is carpeted with moss pink.

or preferably more, to gain the mutual protection. If you are planting large evergreens, as Pines and Cedars, 10 to 20 feet high, it will be best to leave 3 to 8 feet space between the outer branches of each tree, and to plant two or three rows of trees to make a complete screen. This results in the sun reaching the lower branches of each tree, and thus making a dense screen or windbreak. Otherwise the lower branches are shaded and killed.

The grouping of evergreens is comparatively an easy matter. They show what they are when they arrive, unlike deciduous trees and shrubs. Evergreens may be grouped alone or with other trees and shrubs. If they love company, it does not mean necessarily evergreen company. The best Pine timber is frequently mixed with Birch and Oak, and in landscape planting Oak and Pine make one of the strongest combinations. If you wish a belt of evergreens mixed with deciduous trees and shrubs, the evergreens can be planted in August and September and the shrubs the following autumn and spring.



Hedge of tall Cedars planted by us to separate the service court from the formal garden for Mr. Stanley Mortimer, Roslyn. This hedge is double, to more effectively shut out sight and sound. We offer hundreds of similar evergreens

water in a season as a Pine tree of the same bulk; therefore, a moisture-retaining soil is not necessary.

Plant and let Nature work for you. Rain and sun cost nothing, after the land is paid for.

How to Order. Order from this price-list or, if you wish more rare varieties, write for list. It is not necessary to come to the Nursery to select your stock. We have large blocks of evergreens, and will select trees of good quality. There are very few trees of unsymmetrical form, and these we skillfully prune and keep to grow into good-shaped specimens, or throw into the bonfire. However, a visit to the Nursery, either summer or winter, may be a revelation to you of the beauty and variety of evergreens, and may aid you in understanding which is the most economical size to buy for various purposes.

Large evergreens, from 10 to 30 feet, had best be the subject of correspondence or, preferably, a conference on your grounds or at the nursery. Large evergreens, up to 25 feet, can be safely shipped by rail and larger sizes by barge.

We are experimenting with all the evergreens we can get that are likely to survive here. They are being tested in the Nursery and in various sites; seashore and center of Long Island; on the mainland, on

Hemlocks dislike the dry northwest wind. Therefore, when they are young, they may be surrounded with deciduous shrubs, as Weigela, Golden Bell, Spirea, Viburnum, or Witch Hazel. These should be cut back or moved away, to allow 2 feet of space for the sunlight around the evergreens. One of the best Pine groves we have seen is arranged in this manner.

The planting of evergreens is one of the simplest horticultural operations. If there is no ball of earth on the roots, spread the roots out in the hole and cover with mellow earth and pack firmly with a stick or the foot. If the ground is dry, water it. A mulch of leaves, straw or manure will help hold the moisture. With evergreens shipped with a ball of earth, arrange the group by setting the trees in the positions desired, dig the holes and set the trees in. Then remove the covering to the ball of earth and spread out the roots. If the ball of earth should crumble, that is no special harm, spread out the roots and cover them with mellow earth. It is less necessary to water them than where the trees are delivered without ball of earth. However, in summer planting, the demands of the foliage are constant and it is not wise to omit water.

Carting good soil is rarely necessary for evergreens, because, as you have probably noticed, they are usually native to the poorer soils. Evergreens require only a small fraction as much moisture as deciduous trees; that is, a Maple tree will need ten times as much



Sand-bluff planting on property of Mr. W. Emlen Roosevelt, Oyster Bay, L. I. A few years ago this was a bank of running sand. It was planted with Red Cedar, Bayberry and Broom, and the native growth of Locust, Virginia Creeper, Poison Vine, Oak and Blackberry encouraged. A comparatively inexpensive sea-wall of posts and rocks holds the base.



Bluff at Red Spring, Glen Cove. In the winter the loss of land at the top is rapid, but can be prevented by close planting with small evergreens (as described under Pitch Pine), mixed with various deciduous shrubs and vines. Partial death of the trees at the top could have been checked by low planting about their roots. Concrete sea-wall and jetties of boulders.

dry, sandy soil and heavy damp soil, on wind-swept hill and sheltered valley or open plain. We occasionally give away some of these to customers who are willing to test them. Let us know if you are interested in this.

Time to Plant. Small evergreens, 3 inches to 3 feet high, we plant without balls of earth all the year, excepting from October to March. In June and July the new growth is soft but they live the same as cabbage. Medium-sized evergreens, 3 to 8 feet high, with balls of earth, can be planted all the year. If planted between October and February 20, it is best to mulch the roots to keep out frost, and to protect the tops from wind. Large evergreens, 8 to 40 feet high, with balls of earth, we move all the year with good results. "What is the best time to plant?" is usually the first question. It should be the last. What are my needs and what class of trees will do? What species and geographical variety of the species will best fit the soil and climate? Who has it in the sizes wanted at a fair price? What is the quality of roots and top? Will they be dug and delivered with good roots? What are the seasons for planting?

Arborvitae · Thuya

American. *Thuya occidentalis*. Before the days of the California Privet, this was the most popular hedge plant. It stands shearing well and makes a dense screen. Its popularity was due to the abundant supply and the rapidity with which it could be grown from cuttings.

One of the most eminent and the first landscape gardener in this country, A. J. Downing, says, "The only fault of this tree as an evergreen is the comparatively dingy green hue of its foliage in winter. But, to compensate for this, it is remarkably fresh-looking in its spring, summer and autumn tints, appearing well at those seasons with the bright verdure of deciduous trees."

It sometimes winter-kills on Long Island or gets open and ragged. Therefore, for extensive planting, the Red Cedar and the hardiest varieties of Pines and Spruces are preferable.

Siberian. *T. occidentalis*, var. *Wareana*; syn., *T. Sibirica*. This is darker green and more dense in growth than the American. It forms a broader pyramid and is slower in growth.

We have uniform pyramids accurately sheared, which are suitable for formal gardens and vases. They are also useful for making evergreen groups, especially those which are to be kept below a certain height.

Pyramidal. *T. occidentalis*, var. *pyramidalis*. This forms a dark green shaft resembling the young plants of Red Cedar. It will make a column 10 feet high and 2 feet wide and is, therefore, valuable in formal gardens.

Booth's. *T. occidentalis*, var. *Boothi*. There are many places where a dense, globular-formed evergreen that will stay about 3 feet high is needed, and the Booth's Arborvitæ will fill that requirement excellently.

Dwarf. *T. occidentalis*, var. *globosa*. As a substitute for Box edging this is useful. It is dense in texture and can be used either as garden edging or in carpet-bedding with Retinosporas and other evergreens. It can be kept trimmed to 1 or 2 feet in height.

Golden, or George Peabody. *T. occidentalis*, var. *lutea*. A bright golden yellow all the year. Useful in evergreen beds to give variety and to relieve the somberness of the green. It is equally as good as the *Retinospora plumosa aurea*.

Chinese. *T. orientalis*. A pyramidal tree with branches set edgewise. Of value for hedges, particularly in the South. These cheap little plants can be used for bordering garden paths. The winter color is a rich bronze.

Standish. *T. Japonica*; syn., *Thuyopsis Standishii*. A rapid-growing species, resembling the American, and useful for hedges.



Laundry paddock of Red Cedar planted by us. A windbreak of this kind prevents tearing of the laundry. Residence of Mr. Wm. Baldwin, Garden City



Arches for garden paths, entrance gates, or they can be placed end to end, as in the formal garden of Mr. Stanley Mortimer, Roslyn, L. I. These arches are accurately trained, and can be taken apart and shipped. See also privet arches on page 62.



Tall Cedars in our nursery, ready for transplanting any time of the year. These 25-foot trees can be safely shipped.



Cedar Hedge, protecting the vegetable garden of Mr. W. Emlen Roosevelt, Oyster Bay, L. I. The Marsh Elder (*Baccharis halimifolia*) growing on the Beech at high-tide level. See page 56.

Red Cedar

(*Juniperus Virginiana*)

This is the cheapest evergreen for immediate effect. It is among the best evergreens for sterile, sandy soil and salt spray.

We have solved more landscape problems with the Red Cedar than with any other evergreen, not only because it is abundant and cheap, but because it is beautiful and rapid in growth. A plantation of young Cedars will gain in height as rapidly as the average Pine or Spruce.

The illustrations show some of the uses to which it has been put. The service court and laundry paddock are problems at every house. Cedars will make screens for the least cost in the most dense and thorough manner, and occupy the least space.

For screening buildings, we have planted hundreds of tall Cedars which have commenced work right away and kept it up the year round and proven that they can keep it up for 50 or 100 years, for Cedars are very long-lived trees. It is amusing to see people try Lombardy Poplars for this work on unsuitable soils and exposures, because "Poplars are so quick, you know." The Poplars will frequently grow quickly for two or three years and then, like a tattered veil, commence to thin out and look worse than no planting.

Privacy and seclusion are fundamental demands of human nature in a civilized stage. There should be portions of the lawn, garden and porches secluded from intrusion. Rest and repose are nearly as essential as food. The flower garden can be screened from the other portions of the ground and become practically an out-door room.

We have thousands of Cedars ready.

The gardens of Italy are famous for the Cypress,—tall columns of bronze-green. In the formal gardens on large, recently established country estates, we have reproduced this effect with the native Red Cedars. In our Nursery are specimens trained for this purpose from 3 feet to 35 feet high.

For bluffs and sand dunes, small Cedars should be planted thickly with Pitch Pine, Scotch Pine, Bayberry, Virginia Creeper, Goldenrod and other drought-resisting plants.

We move native Cedars any month in the year. We have invented machinery for successfully and economically handling them. There are several details essential to success and we will furnish experienced men. The soil or geological formation on which they are growing is an element which needs to be considered in some cases.

Blue-Red. *Juniperus Virginiana glauca*.

Occasionally in fields of Red Cedar is seen one with a decided blue foliage added to the blue color of the berries.

White. *Chamaecyparis spheroidea*; syn., *Cupressus thuyoides*. The White Cedar native to the coast swamps from Massachusetts southward is distinct from the White Cedar, or Arborvitae, from Maine to Michigan. It is a tall, black-green pyramid which can be seen along the Montauk division of the Long Island railroad in wet ground or next the salt meadows. It is suitable to plant in such places.



Residence of Dr. D. H. McAlpin, Morris Plains, N. J. Mass of large Pine, Hemlock and Spruce planted by us in 1906 on Hicks Tree-Movers. Photographed in 1907. We have hundreds of similar trees suitable for shipment by rail in August, September, winter or spring.

Mt. Atlas Cedar • *Cedrus atlantica*

The Cedars of Lebanon, introduced by the crusaders and planted about the older English castles, are the noblest and broadest evergreens in England. The Mt. Atlas Cedar grows with the Cedar of Lebanon in Palestine, and so closely resembles it that some botanists consider it a variety of the same species. The Mt. Atlas is the hardier of the two. It should be planted in groves of Pine and Spruce. If this is done, in a few years people will be surprised to see gracefully arching branches of sparkling blue-green foliage, and many inquiries will be received for the name of the new and beautiful evergreen. Our plants are from a tree 35 feet high on Dana's Island, Glen Cove.

Blue. *Cedrus Atlantica glauca*. This is as blue as the Koster's Colorado Blue Spruce. There are a number of trees growing on dry, exposed hills on Long Island and northern New Jersey.

Cephalotaxus

Cephalotaxus fortunei. This belongs to the Yew family and has all the good qualities of the Yew, with the addition of having larger foliage in more graceful, arching sprays. It likes a sheltered and moist place, but makes a beautiful plant here in the open until late winter, when a few branches get brown. There are beautiful old plants of it at Glen Cove, 10 feet high and more in width. It will endure shade and we would recommend its use near the springy places on the north and south shore, either in full sun or half shade.

Firs • *Abies*

Erroneously *Picea*

The Fir family is typified by the Balsam Fir, train-loads of which add to our Christmas cheer.

Sentimental friends of the forest lament the destruction of future valuable timber. They should study up the question before writing to the papers and forest commissioners, urging the abolition of the Christmas tree.

First, the Balsam Fir is not valuable timber; second, the trees cut are weeds in a pasture and not

Firs, continued

generally from forests; third, in the bountiful provision of nature, a dozen trees or more will get to the Christmas tree size for one that reaches saw-log size; fourth, in cutting Christmas trees only a very few are selected.

The Firs are all tall, pyramidal trees with a pointed top. With the exception of the Concolor and one or two others, they are all a very dark, lustrous green and have a richness unexcelled by other evergreens.

Nordmann's. *Abies Nordmanniana*. The large specimens in our Nursery excite the admiration of most people who see them. They are very broad pyramids of dark, lustrous green. As they retain the foliage for several years, they are very dense.

We recommend their use as ornaments in a group, rather than windbreaks or screens. They thrive best in company with other evergreens where their roots can penetrate deeply into unfrozen ground and where they are protected from the severest winds. Then they are hardy and long-lived. Our trees are growing wide apart and are frequently root-pruned. Like the Oriental Spruce with which it grows in the mountains of Asia Minor, it has long, coarse roots.

Silver. *A. picea*; syn., *A. pectinata*. This is the common timber Fir of Central Europe. We have a number of large trees, 10 to 16 feet high, which we offer at less than the cost of growing them because they are not reliably hardy, becoming brown in severe winters in exposed places.

Veitch's. *A. Veitchii*. This is the color of the Nordmann's Fir, but with even more of the silvery sheen on the lower side of the foliage. It is a taller and more narrow growing tree. It appears to be perfectly hardy in both foliage and bud. This and *A. homolepis* will, in our opinion, prove to be the best Japanese conifers.

Concolor, or White. *A. concolor*. Of all the good plants from the Colorado mountains, we would place this in the first rank. It is nearly as blue as the far-famed Colorado Blue Spruce, but it is not so decidedly different from the normal

Fir, *concolor*, continued

color of evergreens and, therefore, can be used in larger masses. It is a tree with an appearance of stability, of rich elegance and dignity. No insect, fungus or climate troubles have developed. It is perfectly hardy, even on the seacoast of New England. It is broader, more solid and permanent-looking than most of the other evergreens, and promises to be a long-lived tree, retaining its lower branches in perfect condition.

The reason it has not become more commonly planted is because of its comparatively recent discovery and the more startling novelty, the Colorado Blue Spruce.

Most of the plants are supplied from Europe, and some are grafted from side shoots, making crooked trees. Another trouble is that some of the foreign stock is of the variety native to California, and, therefore, not so hardy. It has long, coarse roots, and occasional root-pruning is necessary to keep it in condition for successful transplanting.

We have grown our larger trees in squares where they have ample room to develop, so that they can be root-pruned. It may be a trite saying that it should be in every collection, at least in every collection that has room for a dozen trees of medium growth.

Cephalonian. *A. Cephalonica*. Named from the island it inhabits on the west coast of Greece. It resembles the Nordmann's Fir and makes a broad, dark green tree of rich and solid appearance.

Siberian. *A. Sibirica*. A promising, rapid-growing Fir of soft foliage; lighter green in color than the other Firs.

Fraser's Balsam. *A. Fraseri*. This is native of the southern Allegheny mountains, and, so far as we have tested it, makes a handsome, narrow pyramid of dark green foliage with the delightful spicy aroma familiar to those who know the balsam pillows. It promises to be better adapted to this climate than the Balsam Fir of the northern forests. We have a number of well-formed specimens offered at low rates.

Sub-Alpine. *A. sub-alpina*. A handsome, blue-green species from the Rocky mountains, resembling Concolor Fir.

Noble. *A. nobilis glauca*. A dwarf, compact bush of bluish foliage, of value only in collections.



Concolor Firs moved by Hicks Tree-Moving apparatus for Mr. H. McK. Twombly, Madison, N. J.

American Hemlock, continued

by the forest fires and crowding of deciduous trees. It is now growing wild at Oyster Bay, Cold Spring, East Norwich, Wheatly, Glen Cove, Roslyn, Port Washington, and The Alley at Little Neck.

It is not good for seaside planting. There is a map published by the New York Commission for Additional Water Supply, showing the amount of salt, or sodium chloride in the rain-water on different parts of Long Island. At Southampton there are sixteen parts of chlorine in a million parts of water. In the center of Long Island there are four parts and on the north shore seven parts. The California Privet (*Ligustrum ovalifolium*), native to the coast of Japan, thrives best and is hardest where there is the most salt, not because of the salt, but because the ocean influence makes the climate moist and equable.

Hemlock thrives best where there is the least ocean influence. It is damaged on the south shore of Long Island by the warm winter winds from the ocean, which excite the transpiration of sap from the foliage. These winds are alternate with dry, cold, northwest winds. A few hundred yards from the coast, the Hemlock will thrive if in a grove of trees or shrubs of similar size.

We would not advise planting Hemlock isolated on the crest of a bare hill. If you want a Hemlock hedge in such a position, trim the plants to make them dense.

We have a large stock of extra-sized Hemlocks, 5 to 9 feet high, that have been sheared to dense, handsome pyramids. They are suitable for hedges or screen groups, windbreaks and massing about the foundation of a house. Such Hemlocks are especially valuable for planting around the base of groups of tall Cedars. It frequently occurs that Cedars 20 to 30 feet high are planted as a screen to buildings, as windbreaks, or background for flower gardens. The bases of such trees are occasionally bare of foliage and irregular. The Hemlocks are naturally full at the base, and their graceful outlines give a touch of beauty to the groups.

American Hemlock (*Tsuga Canadensis*)

The most graceful evergreen for this region. It is native to Long Island, but that fact is known to very few people because of its rarity at present. Like the White Pine, it was probably cut off by the early settlers and the remnants nearly exterminated

American Hemlock, continued

Another quality of Hemlock is but little appreciated—its ability to stand shade. No other evergreen except the Yew exceeds it in this respect. Hemlocks should be planted in the edges of woodland, along woodland drives and on steep north slopes. A Long Island forest is often a monotonous collection of nearly uniform telegraph poles, and one of the difficult landscape problems with new residences in such situations is planting the border and interior of such woodland.

One solution is to plant Hemlock, Yew, *Cephalotaxus Fortunei* in the shadiest portions with White Pine, Norway and Douglas Spruce where there is half sunshine. For deciduous planting, add Beech and White Birch where they can have a sunny position, backed by the darkest evergreens. Plant, also, Flowering Dogwood, Red-flowering Dogwood, Japanese Dogwood, Judas, Azalea, Golden Bell, Dwarf Horse-Chestnut, Viburnum, Laurel, Holly and Rhododendron, with the following vines to climb the tree trunks. Bitter Sweet, *Euonymus radicans*, Honeysuckle, Climbing Roses, Trumpet Creeper, Virginia Creeper and Wistaria. Besides these, there are a host of small woodland wild flowers and bulbs. We offer Hemlocks up to 24 feet in height.

Carolina. *Tsuga Caroliniana*. The Carolina Hemlock is a hardy, handsome tree of lighter green color and foliage wider apart than the common.

Old Hemlock Hedge

We offer about 400 feet of hedge, as illustrated on page 11. It is about 30 years old and has a mature, long-established appearance. It most closely re-



Hemlock Screen to stable at Oyster Bay, L. I.

Old Hemlock Hedge, continued

sembles the famous Yew hedges of England. There are thousands of dollars annually wasted by importing English Yew, which dies or gets ragged in a few years. This hedge has been root-pruned to prepare it for successful transplanting. It can be taken up in numbered sections and planted as it was before. It is far cheaper than brick or stone walls to surround a formal garden, and much more beautiful and has none of the raw, new look of such walls. It can be delivered on our tree-movers over a wide radius on the good roads of Long Island, or it can be shipped by rail.

This hedge offers an unequaled opportunity to architects and landscape architects to obtain immediate results for their clients.

See similar hedge that we moved for laundry-yard screen for Mr. W. G. Oakman.

Juniper · Juniperus

Common. *Juniperus communis*, var. *Canadensis*. This is a common plant on the abandoned pastures of New England, and is occasionally found wild on Long Island. It forms a broad, spreading mat of ascending branches, sometimes 15 feet wide and 3 feet high. It is a useful plant for low evergreen groups or for edging taller groups for the top of a terrace or near the seashore.

Golden. *J. communis*, var. *Canadensis aurea*. This is the best low golden evergreen. It is of a bright clear color and remains low. We have a stock of it which has been sheared and roots pruned and gives good mature effect, the plants being 5 to 8 years old.

We recommend it for beds of evergreens, as described under *Retinospora*.

Prostrate, or Trailing. *J. Sabina*, var. *prostrata*. This is a very distinct species, being wholly prostrate and spreading along the ground in wide circles. It has a dark green color and a moss-like texture. Along the coast of Maine it clings to the rock within reach of the surf. It is appropriate for the top of a stone wall, at the side of terrace steps, or at the edge of groups of evergreens. In the dry portion of a rock-garden, it will be especially at home. Some of the plants are a dark green color and others blue, the latter being the variety *Hudsonica*.

Chinese. *J. Chinensis*, var. *procumbens*. This is an even more compact bed of moss than the preceding. In Japan it is used for holding the drifting sand dunes, showing that their horticulture has advanced farther than ours in making plants work for mankind. The oldest plant in our Nursery is 5 feet in diameter and about 8 inches high. It has been growing ten years. The plant makes such an even growth as to suggest its use instead of grass in covering the ground. The color in winter is a brighter green than any similar evergreen. It is pleasant to walk upon.

Irish. *J. communis*, var. *Hibernica*. While this plant has decided uses in landscape gardening, we have decided to grow as little of it as possible because it is so frequently winter-killed. It is a narrow pillar, perhaps 1 foot in diameter and 6 feet high.



Group of Scotch, Austrian, Red and Mugho Pines planted in 1893 from our plans made for Mr. J. F. D. Lanier, now the residence of Mr. Chas. R. Steele, Westbury. We have Pines like these for immediate shipment, and little Pines that will grow such forests for \$10 per acre.

White Pine • *Pinus Strobus*

See back cover for large-moved Pine

The White Pine is the biggest and noblest evergreen of its region. It is native from the southern Appalachian mountains to Long Island, Canada and westward to Minnesota. It is the most valuable timber tree of the region, and the rapid advance in price shows the folly in this country of not heeding the example of European countries and encouraging a second growth, either by natural seeding from a few mother trees left for the purpose, or by artificial planting. The preservation of forests on the water-sheds is important; it lessens destruction from floods and loss from low water for navigation and power.

In the state of Maine there are many people who say that they have cut hay or dug potatoes thirty or forty years ago, where now the portable saw-mills turn out a highly profitable crop of White Pine lumber. The land was abandoned, and was re-seeded by old trees standing a few hundred feet away. These areas would be very much more profitable, if, like the forests of Germany and France, the trees had been planted or thinned out to uniform distances, thus making clear lumber.

You have realized the need of forest preservation for the generation now living and for the future. Here is a chance to try it. Small trees have probably not been offered to you that are cheap and sure to grow. Now is the time to start. You and all who see and hear about the forest you planted will learn how easy it is to grow timber. Perhaps your land is too valuable for a crop of timber. It is an object lesson and a good investment, nevertheless. The trees will improve the selling value of your land. They will improve its value for residences.

In our Nursery you will see beds of White Pine two years old. They look as even as green moss. The Professors of Forestry say that this is the economical size to plant. With compound interest for thirty or fifty years, it makes a great difference how cheaply the plantation is started. Planting a Pine forest is simple—open a cleft and plant. When that fact is generally known, there will be a great advance in forestry in this country. The unknown and imaginary difficulties of growing trees, and fire protection, are as great a handicap as the American get-rich-quick spirit, and the annual tax on growing timber.



Pine and Oak is the strongest, best, longest-lived, cheapest to start and maintain; beautiful combination for Long Island. Planted on the gravelly side-hill next the railroad, on the grounds of Mr. Clarence H. Mackey, Roslyn. Guy Lowell, Landscape Architect.



White Pines in Westbury Nurseries, 1 1/2 ft. high, 4 yrs. Bushy plants, with good roots and not crowded. The size for economical planting, and old enough to grow rapidly

White Pine, continued

If you wish a forest planted, we will visit the ground, report, and may be able to do part of the work. The Forest Service of the United States Department of Agriculture sends experts to inspect forest property and report on the best treatment.

So much for the forestry side of the White Pine. Most of our customers are interested in its use for ornament, windbreak and screen.

White Pines are very rapid in their growth. We can show you plants that have grown from 1 foot to 9 feet in height in three seasons. Such a tree is apt to be open in its young stage, and a slightly slower growth will make a denser tree. The White Pine may be made to grow in a dense form by nipping back the tips of the leading side shoots in June or July. If it seems too large for your situation, try this experiment and you will be surprised to see what handsome, dense foliage it will make.

White Pines are easy to transplant. The loss from transplanting is very small or frequently nothing. It naturally makes an abundance of fibrous roots and no tap-root. It is able to recover quickly from the shock of transplanting, even with a small amount of roots.

We have the White Pine in all sizes, from 2 inches to 40 feet high, and can transplant them with equal success; in fact, with the large sizes we recall no failures. August and September planting has been just as successful as March, April and May. With the sizes above 10 feet transplanting from



Two methods of packing small Evergreens.—On the left, ball of earth in burlap; on the right, roots coated with thick mud to prevent evaporation, and packed in damp sphagnum moss

White Pine, continued

October to March and June to August has been entirely successful. When other people forget that tree-planting can be done and discontinue ordering, then is the time—mid-winter or midsummer—that we move large evergreens for ourselves, and find it both economical and successful.

Can you not profit by this example and order Pines, Cedars and other evergreens moved in the slack season? The trees are here; you have only to call and see them, or write. We own White Pines in different parts of the country and can look up others. We can send tree-mover and men to move them for you. Some landscape architects have not become accustomed to the successful planting of large trees, and the knowledge that an abundant supply is available. Therefore, their clients have to wait 10 to 20 years for results which we can furnish in one or two years.

Pitch Pine • *Pinus rigida*

Pitch Pine is the most abundant evergreen on Long Island. Not one person in a hundred knows its beauty and value for landscape planting. The reason for this is that over 90 per cent of the Pitch Pine forests have been repeatedly burned over, destroying the lower branches of the trees and, what is worse, destroying the best qualities of the soil.

By the way, these forest fires in the Pine and scrub Oak forests are largely responsible for the poor reputation of a large part of Long Island. These forest fires can be largely prevented by applying the State Fire Warden Law, as it is in the Adirondacks.

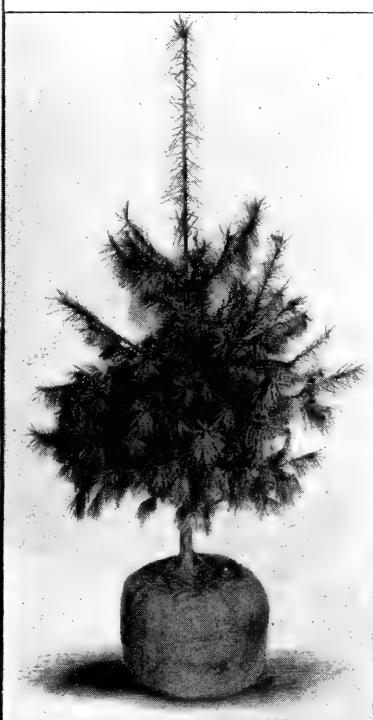
The Pitch Pine has a dense, round head of sunny green color. It looks alive all winter. It is a pleasure to rest the eye on a grove of young trees with their embossed and rounded sky-line. They need no care, and thrive best on the poorest soil. For the first few years they make more bulk than any other evergreen, except the Scotch Pine. For the seaside they are the best long-lived Pine yet tested for Long Island.

Professor C. S. Sargent, Director of Arnold Arboretum, Harvard, says of it "This tree is valuable because it can be raised more quickly and cheaply in the northern states than any other conifer from seeds scattered broadcast on the ground or sowed in shallow drills; and no other conifer grows here so rapidly on dry, sterile gravels, which it soon covers with dense forests. It is often valuable, too, where the soil is poor, as an ornamental tree, and in old age it frequently becomes extremely picturesque with its dark red-brown roughened and deeply fissured bark, contorted branches and sparse dark yellow-green rigid leaves which stand out stiffly from the branchlets."

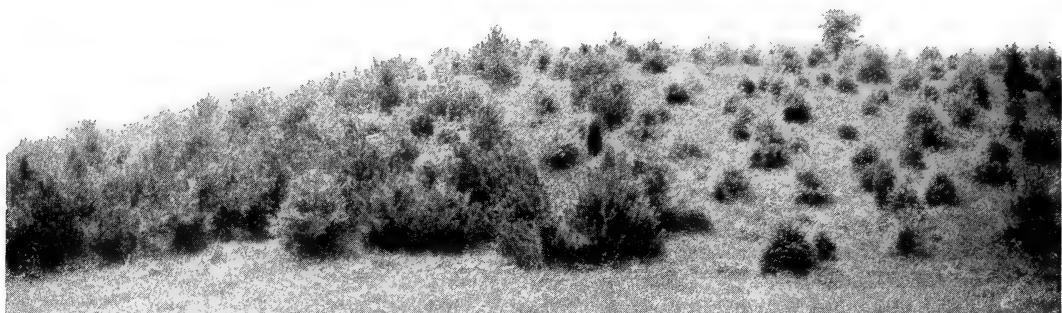
Between Babylon and Bay Shore there are old trees of it with the White Pine. The sea influence has prevented the White Pine reaching its best development, but the Pitch Pines are venerable old trees, well worthy of their position in a lawn.

The Pitch Pine should form the backbone of groups. It is especially adapted to what the geologists call the Rockaway gravel, a formation occurring only from Lynbrook to Far Rockaway.

It can be kept low and bushy by an occasional trimming and looking much better than the balloon-shaped shrubs as usually pruned in that region.



The reason our Pines make a good vigorous growth the first year, not short bony tips, is because we have them root-pruned to produce numerous fibrous roots, and no expense or skill is spared to save them in digging. The roots are wrapped against the ball and burlapped. In the center an 8-foot Hemlock crated for shipment.



Planting of small Pines on estate of Mr. E. D. Morgan. The heavier growth on the left illustrates the fact that the section of the genus containing the Scotch, Pitch and Austrian Pines grow faster when young than the White Pines on the right

Pitch Pine, continued

Sand bluffs along the shore of Long Island Sound are rapidly wasting away, narrowing the lawns and sometimes endangering residences. Sea-walls hold the bottom. Pitch Pine will help hold the sliding bank at a steeper angle than sod. The sod requires that the bank be graded back less steep, needs good soil, roots only a few inches deep and may slip or dry out. Pitch Pine, Cedar and other evergreens root deeply, thrive on sterile sand and salt spray and work all the year. Damage is most severe in winter. The wind blows the sand loose; even when frozen, and, thawing, lets the surface slide. The drifting snow carries sand with it.

Pitch Pine, continued

Beating rains gully out the bluff and carry the sand down. Pitch Pine will check all this. It keeps the wind off, holds the snow, prevents the frequent thawing, and lessens the gullying by the rain. Its deep roots anchor it and check sliding, and it holds the accumulating leaf-mold from the trees and shrubs which should accompany it. Road banks, steep terrace slopes, old sand pits, all provide economical uses for Pitch Pine. For holding sand dunes it may be worth thousands of dollars to many landowners. On Cape Cod the government uses it to prevent the drifting of sand. Plant 5 to 10 feet apart.



Residence of Mr. J. S. Phipps, Westbury, L. I. *White Pines* planted by us on Hicks Tree-Mover, June, 1907, photographed August, '07. We have large Pines ready for immediate delivery any week in the year, and have invented methods to make them succeed.

Pine. continued

Scotch. *P. sylvestris*. For a quick, symmetrical, cheerful blue-green tree, plant the Scotch Pine. Mix in permanent trees, as White Pines, White Spruce, Englemann's Spruce and Cedar. In a mixed grove of various Pines fifteen years old, the Scotch Pine is largest and broadest. The tree is of good shape with full round top. It is so dense when young that it has good value as a screen. We have grown large quantities from seed collected on Long Island. The trees are bushy, vigorous, and have good roots. They will give as much screen for the money as any evergreen we offer. Evergreen groves should be thinned out, and, as these are short-lived, they will remind the owner of the necessary thinning in twenty years or more. For planting on the seashore it should be largely used, either alone or mixed with the White Spruce, Pitch and Austrian Pine and Red Cedar.

Austrian. *P. Larico*, var. *Austriaca*. If the Austrian Pine would live in good condition seventy-five years, there would be no fault to find with it. The foliage is a good pure green, the form is round, full and solid. The needles are stiffer than any other Pine and seem able to resist salt spray, dry winds and drought. In the central parts of Long Island it is a handsome tree for twenty or thirty years. Near the sea-coast it lives longer. The best Pines that have been planted along the south shore of Long Island from Far Rockaway to Southampton are the Austrian. On the mainland our statement of its being short-lived is frequently refuted by examples of old trees.

Pinus densiflora. Professor Sargent, Director of Arnold Arboretum, says: "Although an exceedingly picturesque and beautiful tree, it is rarely used by the Japanese as an ornamental plant, although it is a common inhabitant of their artificial forests. This tree is hardy in New England where it is already beginning to assume its mature, picturesque habit. So far as can be judged by an experience of twenty-five years, this appears to be the most promising of the two-leaved Pines introduced into the eastern states from foreign countries." In the arboretum of the late Charles A. Dana there is a broad, low, flat-topped tree from which we have obtained our stock. The color is a clear, dark living green even in mid-winter. We recommend them highly for mixing in mass plantings and covering sandy areas.

Red, or Norway. *P. resinosa*. A handsome, dark, symmetrical and dense tree, which shows no ground for criticism. In foliage and form it resembles the Austrian Pine, but the needles are not so stiff, and are darker green. The foliage remains on two or three years. It is named from Norway, Maine, and is native from there to Minnesota in dry soil. It will make a beautiful tree on the Pine barrens of Long Island, for it grows with the Pitch Pine on dry, and sterile gravel. We hope to grow it largely, and advise planters to mix in a few to get acquainted with its merits.

Mugho, or Mountain. *P. montana*, var. *Mughus*. The dwarf of a family of giants. Use it with the flat-growing Junipers to cover hillsides where



The planting of some of our cheap *Scotch Pines* to cover a terrace bank. Planted in May, photographed in August



The *Scotch Pines*, 1½ feet high, which we offer will do this in five years. Windbreak to a garden on the bleakest part of Hempstead Plains, at residence of the late Sidney Dillon Ripley



Scotch Pine Grove on Pratt Estate, Glen Cove, planted on sandy ground, has furnished the most economical landscape treatment

Pine, Mugho, continued

tall Pines would shut out the view. To get a quick temporary cover, put in the Scotch, Pitch or Densiflora Pines, cut them back, and cut them out altogether before they crowd the Mugho Pine. In the Alps they cover large areas with a thicket as high as a man's head. On the brink of a precipice they cling to dry rock, and bend beneath the avalanches. Use it similarly on the top of a wall.



Grove of Austrian Pine near the breakwater at Pratt Estate, Glen Cove, showing their ability to stand salt spray



Red Pine (*P. resinosa*) on the estate of Mr. Chas. R. Steele, Westbury, L. I. This is one of the most sturdy and beautiful Pines, and planters are fortunate that we can offer a stock of specimens larger than this.

Pine, Mugho, continued

Plant at the foundations of buildings, at the angles of roads and paths and to feather down a group of tall evergreens.

Scrub. *P. contorta*. A vigorous, rapid-growing species, having the appearance of the Pitch and Jack Pines. It makes numerous side branches at intervals along each season's growth and, therefore, it forms a dense top. Native from Alaska southward.

Jack. *P. divaricata*; syn., *Banksiana*. The Jack Pine. Grows on the thinnest and driest soils; across the bay from Mount Desert we have seen it growing in an inch of rock fragments on top of granite. In the nursery it is one of the most rapid-growing Pines, with an irregular, pictur-esque top.

Bull, or Western Yellow. *P. ponderosa*. The most important timber Pine of the Rocky mountains. It resembles the Austrian Pine, but has longer, whitish green needles.

Pinus parviflora. A Pine from eastern Asia that is worthy a place in collections of choice trees. It is a neat tree of moderate growth and beautiful blue-green color. It is a good companion to the Swiss Stone Pine, being more irregular and picturesque in growth.

Swiss Stone. *P. cembra*. A tree for small groups where a large tree would be out of place. It is a compact, symmetrical tree of blue-green color.

Rocky Mountain White, or Limber. *P. flexilis*. A rare species from the Rocky mountains. Hardy and of slow growth.

Bhotan. *P. excelsa*; syn., *P. Nephaleensis*. The Himalayan representative of the White Pine. It is a very handsome young tree with luxuriant long foliage, making a dense, broad pyramid. The leaves are longer than the White Pine and hang down. Unfortunately, this Pine was partly winter-killed in the winter of 1903-04 under the same conditions that killed California Privet. It is worth planting with other Pines and especially on dry soils where the winter-killing need not be feared.

Pine, continued

Korean. *Pinus Koraiensis*. This is a beautiful tree of blue-green foliage and compact, symmetrical growth. It is entirely hardy and promises to be a long-lived tree. As a food plant it takes high rank, and there is a probability of its being the best nut Pine for this region. In Arizona and adjacent states, the Indians get a large part of their living from the Pinyon Pines.

Umbrella. *Sciadopitys verticillata*. A little tree that ranks with Boxwood and Palms in dignity, refinement and aristocratic bearing, having the rich color and texture of such plants. It forms a narrow pyramid 3 to 10 feet high, of leaves 5 inches long, arranged like the rays of an umbrella.



Residence of Mr. J. Rogers Maxwell, Glen Cove, L. I. *Mugho Pines* are the low cushion-shaped trees which will finish off the group of taller Austrian Pines. (See page 41.)

Retinospora

Japan Cypress; Chamaecyparis

For the summer beauty of evergreens, *Retinospora pisifera* and its varieties, *R. plumosa*, *R. plumosa aurea*, *R. squarrosa* and *R. filifera* are unexcelled. After the severe weather of mid-winter they take on a dull green color like the American Arborvitæ, but not as decidedly so.

We have a large stock of these varieties trained into dense, broad domes and pyramids. They are worth two or three times as much as the usual *Retinosporas* of similar height. Their density and symmetry give them the appearance of age and long established planting. The density of their growth lessens the damage from snow in winter. They are grown wide apart and we move them with three to five times as heavy a ball of earth as is customary, therefore, they are in the best possible condition to give good results. (See page 44.)

The prices quoted are low for their quality.

A frequent use for them is to plant at the base of new buildings or terraces. Another use is to make beds of evergreens on the borders of a lawn or to edge down groups of taller Pines and Cedars. Horticulturally, these close plantings are just what

they like best, for they do not like to stand alone on a wind-swept hill.

Retinospora plumosa. *Chamaecyparis pisifera*, var. *plumosa*. This is a fleecy and plumpy pyramid of light green foliage. It should be used as a background or foil for the other varieties. There is no evergreen more delicate in its detail of foliage than this.

At Newport it is extensively used with the



Bed of fancy evergreens at residence of Mr. Walter G. Oakman, Roslyn, L. I. It contains *Retinospora*, Dwarf Arborvitæ, Nordmann's Fir, Boxwood, Spruce and *Mugho Pine*



Nassau County Court House. Wm. B. Tubby, Architect. The landscape plan and stock from the Westbury Nurseries. Evergreen borders of *Retinospora*, Spruce, Cedar, Laurel, Boxwood, Yucca and *Euonymus radicans*. Corner illustration is of our *Retinospora squarrosa*, 5 feet high, showing broad, dense top and large ball of earth. Compare it with narrow, imported stock.

Retinospora plumosa, continued

other *Retinosporas* in evergreen beds in a type of design that is there highly developed. The bed is designed against an entrance or side of a lawn and with long, flowing curves. It may be 15 feet wide and 30 feet long. This bed is divided into sections of different color. The evergreens used mostly are *Retinosporas* of the following varieties: Plumosa, Plumosa aurea and Squarrosa; Arborvitae in the following varieties: Golden, Dwarf, Siberian; and Yew in the following varieties: Golden, English and Japanese. As these grow, they are kept trimmed to a solid, even mass, sloping from the back toward the front. This type of design is really carpet-bedding, using evergreens the same as Coleus, Geraniums and other tender plants.

R. plumosa aurea (Golden Japan Cypress). *C. pisifera*, var. *plumosa aurea*. This is a bright, cheerful golden yellow all the year. This and the Golden Arborvitae are the two best yellow evergreens, and may be used where a strong contrast is desired.

R. squarrosa (Blue Japan Cypress). *C. pisifera*, var. *squarrosa*. This is the handsomest, small, blue evergreen for the summer and autumn decoration of small areas. It grows as a dense, fleecy pyramid. Each branch is graceful as an ostrich

Retinospora squarrosa, continued

plume, and when beset with dew it sparkles like diamonds.

Our plants are unusually wide and dense from repeated shearing. We recommend them highly for the purposes indicated for Plumosa, and for decorating formal gardens.

R. filifera. *C. pisifera*, var. *filifera*. This is another of the curious varieties developed by the Japanese from the wild species. It is a broad cone of light green foliage, the tips of the foliage being long, green threads, gracefully arching outward and downward.

R. obtusa (Obtuse-leaved Japan Cypress). This differs from all the preceding, being a distinct species, and in appearance it stands in a class by itself. The foliage is a very dark, deep green, rivaling the Yew and Nordmann's Fir. A peculiar beauty of this species is the formation of the lights and shadows. The foliage is in small, curved, shell-like fronds.

R. obtusa nana. (Dwarf Obtuse-leaved Japan Cypress). This pygmy is very dark green, slow-growing and compact, gaining but a few inches per year. It is useful for edging groups of slow-growing evergreens or in a rock-garden. It is a form which the Japanese grow as dwarfs in pots for a century.

Raising evergreens from seed in the middle Atlantic states has not been customary, because it is easy to import or to grow from cuttings; but such are not all reliably hardy or happy in dry soil. We have grown evergreens from seed of Long Island trees and others of similar climates. It has required scientific knowledge, foresight and skill. The result is ready. Will you take advantage of it? Evergreens mean comfort and beauty. They are coming into fashion. It is right that they should, because the beautiful and hardy evergreens are now available.



Windbreak and Screen of Norway Spruce, separating vegetable and small-fruit garden from the lawn, at residence of Mr. J. R. Maxwell, Glen Cove. We have 160,000 White Spruce that will make such dense, narrow, permanent hedges better than the Norway Spruce. Now is the economical time to buy them.

Spruces . *Picea*

Erroneously *Abies*, including *Pseudotsuga*

The Spruce family ranks equal with the Pines. It is less planted for lumber, but more used for ornamental planting and windbreak. All the Spruces are pointed trees, sprightly and cheerful in appearance.

Norway Spruce . *Picea excelsa*

The most rapid-growing of the family, but not the handsomest. It is excellent for hedges, as it stands clipping well, and if kept widest at the base, so that the sun reaches the lower branches, it will keep thick to the ground. A young and vigorous Norway Spruce is a handsome tree. To keep it so, nip off the tips of the leading branches. Otherwise, the trees may become open, ragged and haggard in appearance when twenty to seventy-five years old.

The dislike for all evergreens expressed by a few people is based mainly upon Norway Spruces under this condition. It is about the only evergreen they have known. The American nurserymen are partly to blame for this opinion. It has been easier to import Norway Spruce than to collect seed of better species. They grow quickly when young and are easy to transplant. The buyer of trees is also partly to blame because he could heretofore generally get a bigger tree for the money in Norway Spruce than of better kinds. We recommend the Norway Spruce for hedges, screens, planting on steep sand banks, and as a quick-growing filler in groups of ornamental evergreens to be moved later.

White Spruce . *Picea alba*

The measure of our faith in White Spruce is our stock of 160,000 trees.

Perhaps sixty years ago, Joseph Hicks built schooners and sent them to Maine for lumber. A few White Spruce trees were brought and planted in what is now the garden of Mr. Robert Dudley Winthrop. They are now 60 feet high, full and

dense from ground to top, in decided contrast to the gaunt and rusted Norway Spruces of the same age.

At the arboretum of the late Charles A. Dana, Glen Cove, there are trees of similar age within 50 yards of the sea-wall, fully exposed to the sweep of winds across Long Island Sound. They are in perfect condition, and a beautiful blue-green, uninjured by the severest winter. On the Rockaway peninsula there are a number of specimens that are thriving excellently, being the handsomest evergreens planted and the only old ones dense at the base. At numerous other points along the ocean front on Long Island, there are handsome dense specimens.

On the Hempstead Plains, even in the most wind-swept portions of Garden City, the White Spruce has proven to be the handsomest evergreen.

Why have we praised both the White Pine and the White Spruce as the best evergreens? The White Pine is a broad-shouldered, old giant, stretching his arms widely against the sky. The White Spruce, with her narrow, neat skirts, will make the world just as happy and beautiful and occupy less space. The White Spruce is a symmetrical tree, with a conical head. The numerous branchlets keep it always dense and, therefore, it is sure to remain an efficient screen and windbreak, because the lower branches are retained as long as the tree has sufficient space. The bluish green, glaucous foliage makes its appearance always cheerful and bright. A group of them is never gloomy. We have never heard any one criticize its appearance or its adaptability to this region.

The Norway Spruce has some decided faults when old, being open, ragged and sometimes dismal.



White Spruce in the park of Mr. H. McK. Twombly, Madison, N. J. They screen the house from the entrance drive until a good point of view is reached. They also help stop the noise and smoke from the railroad. No evergreen surpasses the White Spruce in beauty, utility and health in that 1,000 acre park and arboretum.

White Spruce, continued.

The White Spruce is liable to suffer from the bad reputation of its relative, especially from those people who are not sufficiently alert to see the good things and learn the points of difference. One reason that people have not become acquainted with the merits of the White Spruce is because so very few of them have been planted in years past. Naturally, the European nurserymen do not grow many of them because their own species fit their conditions better and grow more rapidly. American nurserymen have not grown them because of the difficulty of starting them from seed. We do not know of any nurserymen in the eastern part of the United States

who have grown evergreens in large quantities from seed. One large Long Island nursery which, years ago, made a specialty of evergreens, gave up growing them from seed because of the difficulties in the first month. Our own first attempt largely failed.

By scientific experiment to determine the proper temperature of the soil and degree of moisture and light, we got them past their infantile troubles. After they are a month old and have begun to form woody fiber in the stem and make the second whorl of leaves, they are easy to grow.

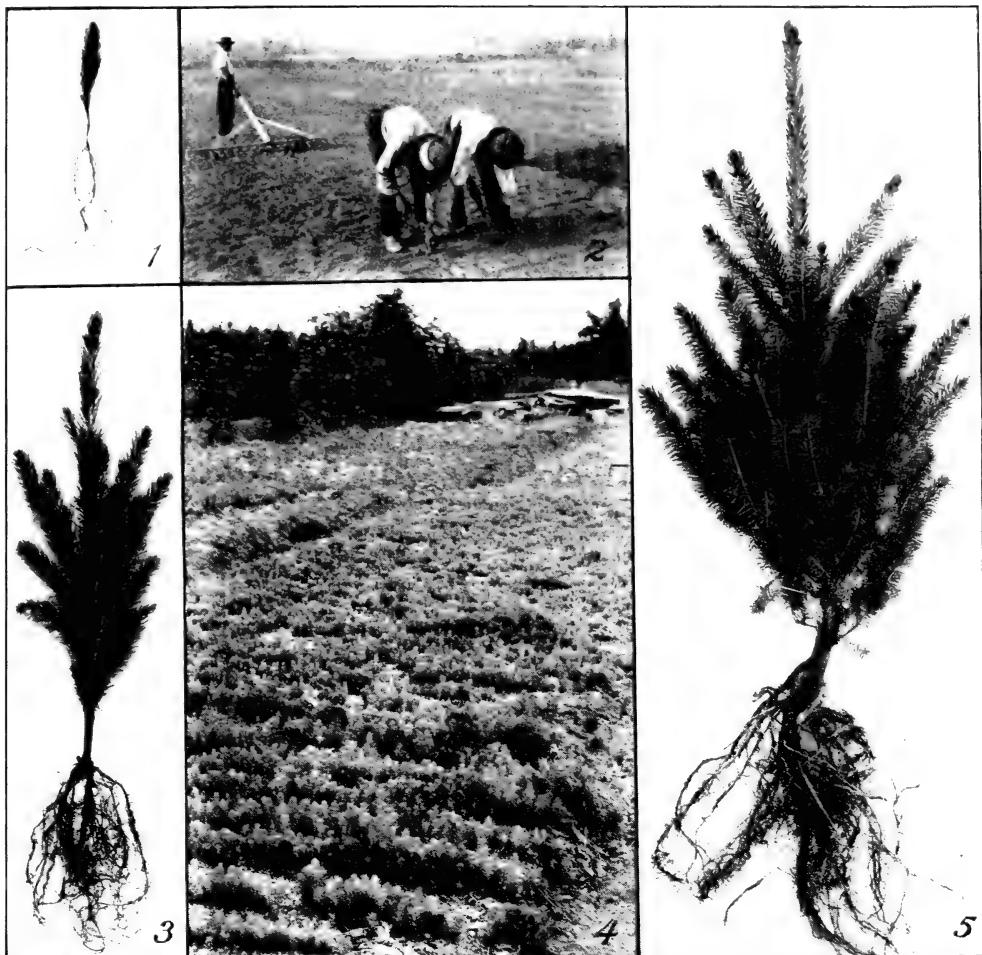
Therefore, buy these little plants and plant them in beds. An economical way is to plow and harrow the ground smooth. Mark it off into squares of about 8 inches by a marker made like a big rake. Plant them with a dibber in the same manner as cabbage. Pack the ground firmly around the roots. Watering is not necessary if the ground is moist. Cultivate with a wheel hoe. In November mulch with 5 inches of leaves. Throw on a half-inch of soil to keep the leaves from blowing away. In spring, uncover, but let the mulch remain between the plants. Very few weeds will appear, the mulch being cheaper than cultivation. In two or three years the plants will be $1\frac{1}{2}$ to $2\frac{1}{2}$ feet high or more, and can be planted out in their permanent positions and will need no cultivation, being strong enough to overcome the grass, weeds and bushes. This is easy, cheap and sure. Will you do it?

The amount of capital needed has been the principal reason for not making large plantations of evergreens. The above is one way to overcome that objection. Many people buy land and do little or nothing to develop it for several years, when trees might be growing this way. The land, rain and sunshine cost them practically nothing. A nurseryman has to charge for the use of his land. It is lack of knowledge, decision and foresight that prevents getting the most out of the investment. It is the wealthiest people who buy the smallest trees. They have the most foresight.

Another way is to plant the little Pines or Spruces 3 inches to 1 foot high in the grass and briars, and let them alone. They will come along all right.



White Spruce on the lawn of Mrs. John H. Cheever, next the ocean, Far Rockaway, L. I. It is on poor gravelly soil. The fiercest gales and salt spray only serve to make the foliage thicker.



No. 1, 2-year White Spruce; No. 3, 3-year plant; No. 5, 4-year plant; No. 4, our stock of 160,000 2-year White Spruce. How many do you want? No. 2, marking off and transplanting White Spruce during the August drought, 1907.; No. 6, block of White Spruce, Concolor Fir and Douglas Spruce in our Nursery.



White Spruce Hedge at the entrance court at the residence of Mr. Charles Steele, Westbury, L. I. Now is the time to secure plants at low cost

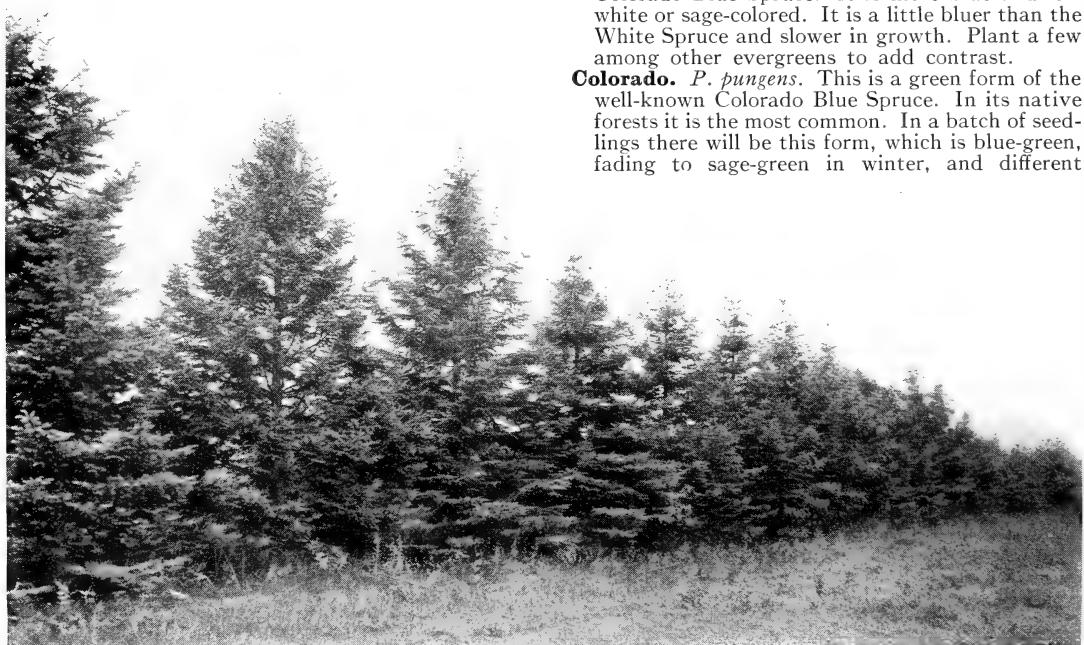
Spruce, continued

Englemann's. *Picea Englemanni*. Some day this will be as popular as the Colorado Blue Spruce. It is also from Colorado, and gives every promise

Spruce, Englemann's, continued

of being longer-lived. The oldest specimens in cultivation are dense, narrow pyramids, retaining their lower branches. The color differs from the Colorado Blue Spruce. It is more blue and less white or sage-colored. It is a little bluer than the White Spruce and slower in growth. Plant a few among other evergreens to add contrast.

Colorado. *P. pungens*. This is a green form of the well-known Colorado Blue Spruce. In its native forests it is the most common. In a batch of seedlings there will be this form, which is blue-green, fading to sage-green in winter, and different



White Spruce from our Nursery, planted on the bleak Hempstead Plains as a windbreak on the property of Mrs. Charles F. Myers. The Hempstead Plains are 7,000 acres, from one to twelve miles from New York City line, a wind-swept prairie which cost the late A. T. Stewart in 1868 about \$45 per acre. How many millions more would they be worth if they were planted? Groups of this Spruce and the drought-resisting Oaks and Pines would do more than anything else, except better train service, to increase its value for all-the-year residence. We can supply this size in any quantity.

Spruce, Colorado, continued

shades of blue, varying from the green to the color of the Koster's Colorado Blue Spruce. It is a strong, vigorous tree, making a broad pyramid. It was first introduced by Dr. Parry, who sent seeds from Colorado in 1861, and first raised by Asa Gray in Harvard Botanical Garden. On the older specimens cultivated in the East, the lower branches are already beginning to die. It is a good seaside tree and should be included in most groups of evergreens for the contrast of its gray-green foliage.

Colorado Blue. *P. pungens*, var. *glaucia*. These are selected from seedlings of the above and are blue-green, or sage-color. Being so striking a contrast and a high-priced novelty it has become widely known and much sought after, and promises to remain in fashion for many years to come. In the harmonious grouping of evergreens, it is rather difficult to place as it attracts too much attention to itself. It appears to say, "Look at me; I cost more than all the rest." It cheerfully lights up a dark corner and harmonizes with a background of Englemann's Spruce and White Spruce, graded back to the darker Pines and Firs. The scintillations of its silvery sheen are like a lace of hoar-frost sparkling in the sun. We have hundreds of these trees and believe that we are offering one of the cheapest opportunities to get trees of good, distinct blue color.

Koster's Colorado Blue. *P. pungens*, var. *glaucia Kosterii*. This bears the name of an enterprising nurseryman who selected an extra-blue tree from which to graft. The color of a block of trees is more uniform than the above. Our stock has been grown here for some time, has large balls of roots, and has become well acclimated.

Oriental. *P. orientalis*. This is the best tall, dark, narrow column. On the Cowl place at Great



Oriental Spruce on the grounds of Mr. Clarkson Cowl, Great Neck, L. I., showing its superiority to the Norway Spruce on the right, which is ragged and open. White Spruce is equally superior with the added advantage of a cheerful blue-green color.

Spruce, Oriental, continued

Neck, there is an avenue of magnificent specimens 45 feet high and 20 feet broad. This species always presents a dense mass of foliage because it retains its foliage for eight or nine years,



Douglas Spruce and *White Birch* at Maxwellton, Glen Cove. Pine, Oak, Spruce and Birch compose well in the landscape, and they like each other's company

Spruce, Oriental, continued

therefore it never gets open or ragged or gloomy. Of course, a lawn planted with this in excess would be too somber and ponderous. The art of landscape design with plants consists largely in arranging the lights and shadows, and the various shades of green. The Oriental Spruce offers the best color of its form. Another evergreen of that form is the Balsam Fir, common in the northern forest, but, unfortunately, it does not retain its lower branches when over 10 feet high in this vicinity. Another dark evergreen is the Nordmann's Fir, which is a much broader pyramid with larger foliage, giving a different texture. The Japanese Yew is equally as dark. A prominent landscape architect says that he would use Oriental Spruce much more often if it was not so difficult to transplant. Like the Hickory tree it first builds a sure foundation of long and deep roots. We grow our plants wide apart and frequently dig a trench around them to root-prune them and make a dense mass of fibrous roots. They are comparatively rare in nurseries because of the difficulty of transplanting them and because they are slow to get to salable size. However, they are not slow-growing when in their permanent location. We advise their use in various soils and situations, where a collection of the best evergreens is wanted.

Douglas. *Pseudotsuga Douglasi*; syn., *Pseudotsuga mucronata*. We recommend this tree highly because of its rapid growth and because it keeps in good condition. The highest authority on trees says of it: "It is one of the most beautiful and valuable of American conifers, promising to surpass in permanence and mature beauty the other conifers of western America." It was introduced by Dr. Parry with the Colorado and Englemann's Spruce in 1861. Like the other Colorado evergreens it has a beautiful green or glaucous sheen

Spruce, Douglas, continued

to the foliage. Its habit, however, is entirely different from the Colorado Blue Spruce or Englemann's Spruce, lacking their sturdy, stiff appearance. The long, graceful shoots arch outward. The foliage is always dense and the long lower branches sweep the ground.

The Latin name indicates its botanical relation to the Hemlock. Its softer texture and more graceful outline suggest its being grouped with the Hemlock, and where the graceful effect of the Hemlock is desired in places too windy for the latter. It grows as rapidly as the Norway Spruce and we recommend that it be substituted.

We make a careful study of the climate and soil of the region from which we get our seed. The value of this to our customers is well illustrated by this species. We ordered seed which was said to have been collected at 8,000 feet elevation in Colorado. After growing several thousand trees a few years they had to be thrown out. On our occasional severe winters they winter-kill, as do some trees imported from France.

We now have an extensive stock of the hardiest form, being assured by the United States Forest Service that the seed was collected at the proper altitude. A large proportion of these trees have the beautiful blue-green color.

Alecock's. *P. bicolor*; syn., *Alcockiana*. This is bluer than the Colorado Blue Spruce in the winter time, especially when viewed by the horizontal rays of the sun illuminating the lower side of the foliage, for the blue is all on the under side of the leaves and is not washed off by winter storms. It is a taller and narrower tree than the Colorado Blue Spruce and grows more rapidly.

Tiger Tail. *P. polita*. Like many other of our hardiest evergreens this comes from the northern mountains of Japan. It is a rough, broad, irregular tree, with stubby, sharp-pointed, yellow-green leaves. It appears to be entirely hardy and promising for windy places.

Yew · Taxus

Japanese. *Taxus cuspidata*. The Yew and Holly, and the Oak have enduring places in the literature of English-speaking people, and there will always be a demand for them. Unfortunately, the English Yew is not reliably hardy in northeastern United States, although many old plants of it are struggling along in sheltered places. Thousands of dollars are wasted in importing English Yew and other evergreens which disappear in a few years.

The Japanese Yew, or, at least, certain forms of it from the colder part of Japan, is hardy and would be extensively used if this fact were known. The oldest plant we know of is about 10 feet high and 21 feet wide. It is very dark green in color and has not been damaged by the severest winters. It is as yet too rare in nurseries to recommend for hedges, but we see no reason why the Yew hedges of England should not be reproduced in this country.

Japanese. *T. cuspidata*, var. *capitata*. This name does not appear in any catalogue now published and we have the only commercial stock of it. It is upright in habit like a Fir tree. A plant about twenty-five years old is 13 feet high and 9 feet broad. It keeps a central leader and in Japan grows 40 feet high with a trunk 2 feet in diameter.



Japanese Yew. In the background are sheared Cedars planted by us in the formal garden designed by Daniel Langton, Landscape Architect for the late Mr. Robert L. Stevens.

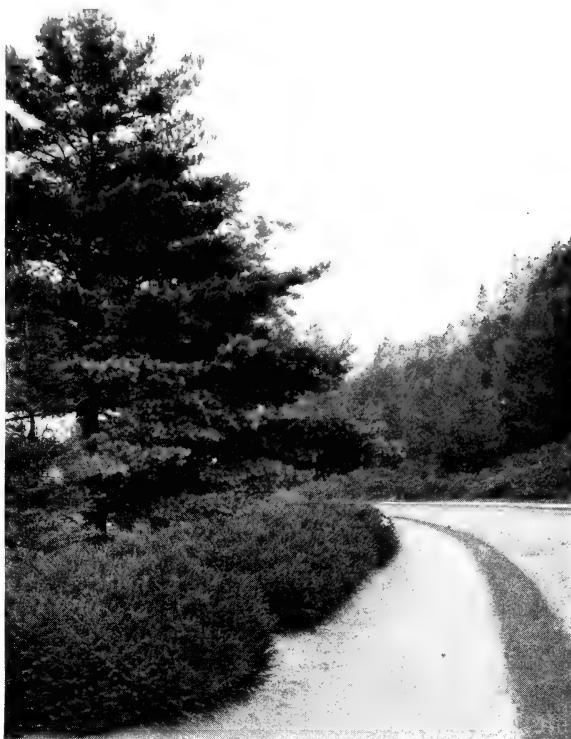
Yew, continued

Dwarf Japanese. *T. cuspidata*, var. *brevifolia*. This is black-green in color, with short, stubby branches indicating great hardiness. We recommend it highly where a low evergreen of irregular, picturesque habit is needed. It will grow perhaps 3 feet high and 15 feet broad in twenty years, resembling in size the Common Juniper, but the branches spread horizontally from a stiff central trunk, whereas the Juniper has numerous trailing branches.

Canadian. *T. Canadensis*. This carpets the damp forests. Some of the old botanies record it as native of Manhattan Island. In cultivation, it forms a beautiful cushion about 2 feet high and 15 feet wide, there being several old plants on Long Island that are hardy and handsome.

Spreading. *T. repandens*. This is a beautiful and graceful plant growing 4 feet high and twice as broad. The branchlets arch gracefully and make a dense, dark green plant. It is very rare and hardy, and, as the name does not appear in the horticultural books, we cannot say where it is native, but it appears to be quite hardy here. It will stand dense shade, but that does not mean the shade of a Silver Maple tree which would exhaust the moisture in the summer.

English. *T. baccata*. This will grow in sheltered positions, and we recommend the purchase of these plants for a dark green cover under Locust trees or shady places in such valleys as Cold Spring and Roslyn,



Canadian Yew (Taxus Canadensis) as a carpet bordering a path. Now that we offer hardy varieties of the Yew family, some of them being varieties not elsewhere listed, we trust they will be used in landscape planting.

Yew, English, continued

or for planting about houses on the east end of Long Island where the ocean climate is favorable.

Golden English. *T. baccata*, var. *elegansissima*. We have a stock of plants twenty years old that have been grown on Long Island and demonstrate the frequent expression that the Golden variety is hardier than the species. They can be used in a garden or planted in tubs.

There are thousands of families in apartments, flats and tenements that should be bringing up their children, all the year, in the country. Tunnels and electric traction and automobiles and the comparative cost will soon compel or permit living in the country. It is objected that the country in winter is bleak, windswept, lacks beauty and privacy. Evergreens will cure this.

There are other objections to all-the-year country residence,—social, educational, amusement, water supply, domestic service, certainty and promptness of transportation, that evergreens cannot cure, but these objections are yearly lessening.

We have the largest size, largest quantity, cheapest, most hardy and cheerful evergreens offered in the northeastern United States.



Englemann's Spruce at residence of Mr. James A. Blair, Oyster Bay, L. I.



Entrance drive to the residence of Mr. T. J. Regan, Wheatley Hills. This shows large plantations of various shrubs bordering the drives and boundaries of the property. Such plantations can be economically made by using small shrubs as offered in our price-list, planted 2 to 5 feet apart. If heavily manured the first year, they will grow rapidly and give a good effect the second year. Thereafter, such groups prove cheaper than the lawn, for they require less labor. For such plantings we recommend Barberry, Deutzia, Red-twisted Dogwood, Elæagnus, Forsythia, White Fringe, Hercules' Club, Upright Honeysuckle, Magnolia, Japanese Maple, Privet, Rhodotypos, Spirea, Sumach, Syringa, Weigela, etc.

Shrubs

We do not head this department Flowering Shrubs because planters are coming to realize that flowers are not the main object. This was well expressed by Samuel Parsons, Landscape Architect, New York Park Department: "The flowers are only an incident." The principal thing is the form, texture, and density of the foliage masses and their way of carrying lights and shadows. It is from such elements that a landscape composition is made. If, in addition, some shrubs give a beauty of flower or fruit, that must be harmoniously arranged, but should not be the controlling reason for its use.

Many of the best shrubs for landscape planting have flowers that are of but little prominence. On the other hand, several of the most showy flowers are on plants which are ugly abominations for the rest of the season. The worst mistakes in landscape design are made by giving too great prominence to freaks of variegated or purple foliage, or utilizing plants mainly for their flowering value.

The attempt is made in these descriptions to state various landscape problems as they appear on Long Island, and to suggest shrubs that may be used in their solution. An index of these problems will be found at the back of the catalogue.

The use of shrubs and other plants for covering the ground instead of grass is but little understood in this region. We have grown many varieties of shrubs, vines and evergreens from seed or cuttings in large quantities, so they can be sold at low rates for this purpose.

A prominent landscape architect says: "The foliage of shrubs that are well established remains green when dry weather turns grass brown. The broad mass of shrubbery will take care of itself when the grass needs frequent attention. It might with advantage replace grass upon all surfaces too steep to walk upon with comfort," and, it might be added, too expensive, or impossible, to keep in good lawn.

Large shrubs are not as decided an advantage as large trees. The reason is that most shrubs will attain a mature effect in two to four years. However, we have a number of large shrubs suitable for immediate effect that are especially desirable about new residences or to use with large trees to immediately complete the landscape. For houses completed after the planting season we can successfully plant large shrubs and evergreens in late May and June or July.

We aim to keep a good assortment of shrubs, but we have not made our nursery mainly of shrubs, for that is an error nurserymen are prone to make, shrubs giving the quickest return on the investment and most of them being easily propagated from cuttings, while most of the valuable deciduous and evergreen trees are propagated from seed, which is more difficult to get and takes longer to grow.

Plantations of shrubs should be made much closer than their permanent growth permits. The thinning should commence in two to four years. It is usually left too late or entirely neglected.

Shrubs are the best under-planting for deciduous and evergreen groves. Trees will generally grow much faster where shrubs shade the ground and hold the leaves about their roots, than when they are growing in the open lawn. Young evergreens, especially Hemlock, make a good start when planted among the shrubs. With evergreens, however, it is very essential that the shrubs be thinned or cut back every year to allow 2 feet of space for the sun to reach the lower limbs of the evergreens.

An economical way to make large shrub plantations is to buy small plants one to two years old at \$8 to \$20 per hundred. Plant them 2 to 4 feet apart and cut them off about 6 inches high. Mulch the ground heavily with manure. The first season will show a luxuriant, dense growth of gracefully arching branches, whereas, the planting of large shrubs, 5 feet high, is liable to be thin the first year, especially if they are not well manured. Large plantations of shrubs can be made and cut down in the autumn, and will do much to relieve the pressure on the short spring planting season.

Althea • Rose of Sharon

(*Hibiscus Syriacus*)

The Altheas and Hydrangeas are the most showy flowers for August and September. We occasionally hear stated: "I do not like Altheas; they have such an ugly purple or magenta color." There are, however, a number of varieties with bright red and pink colors and others that are pure white. The Altheas are all tall-growing shrubs, attaining a height of 10 feet or more. They are usually narrow at the base, forming a V-shaped plant when old. This tendency can be readily corrected by pruning when young. It is best to plant them at the back of groups of shrubs. Altheas make beautiful flowering hedges and the annual pruning, when dormant, does not affect their blooming, because, unlike most shrubs, they bloom on branches of the current year's growth.

Aralia

Aralia pentaphylla. An upright, arching shrub, about 4 feet high, of the habit of *Spirea Van Houttei*, with glossy and waxy foliage. It is not conspicuous in flower or fruit, but the color and texture recommend its use.

A. spinosa (Hercules' Club; Angelica Tree). The second year on a new place will often show this to be the most vigorous of all shrubs. It is as vigorous as an Ailanthus, but nobody hates it as they do the latter. It sends up one or more thorny branches with finely divided leaves 2 feet long and broad. In mid-summer the top is crowned by an equally large cluster of minute white flowers followed by black berries. The stems are thickly covered with spines.

Azalea • Rhododendron

The Azaleas are the deciduous or leaf-dropping members of the Rhododendron genus. The delicate beauty of the Azaleas is as little known as their showiness in mass or the ease with which they are grown. The colors are pink, cherry, carmine, crimson, white, yellow and salmon. Some of these shades clash with some varieties of Rhododendrons, but, as most Azaleas are through before the Rhododendrons begin, there is little trouble on this point.

Culture requirements are the same as for Rhododendrons,—just leaf-mulch; that's all. Azaleas have the advantage over Rhododendrons that there is no foliage to carry through the winter.

The uses and locations for Azaleas are numerous. For decorating woodland they are excellent, harmonizing with their surroundings. Most of the varieties are native to such places and there can be no more beautiful treasure to discover in a woodland glade than the Azalea and Lady-Slipper Orchid. To establish them in the woods, select a place where there is a little sunshine so that they will bloom more freely. Dig a large hole to check the competition of the existing trees. The *Azalea viscosa* is native to swamps where little hummocks appear above the water. Therefore, with the Clethra, Button Bush, Red-twisted Dogwood, Black Alder, and Marsh Mallow, it makes a solution to the

Azalea, continued

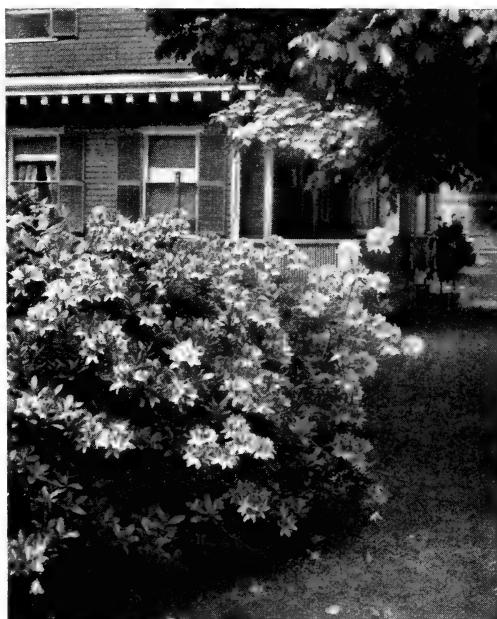
problem of what to plant along the edges of streams and ponds.

Azalea amoena. See Broad-leaved Evergreens, page 68.

A. arborescens. This is native in the Alleghany mountains. The flowers are white or tinged with pink and very fragrant. It is a compact and vigorous shrub with shiny foliage. We recommend it highly for mass planting in shrubberies.

Chinese. *A. mollis.* The *Azalea mollis* has the largest flower of any of the Azaleas, individual florets being funnel-shaped and as large as the Rhododendron. They are in clusters 4 to 6 inches in diameter. They bloom before the foliage appears in May. Colors range through the yellow series, from pale lemon to salmon and deep orange. We have large, old plants that are well established, with large balls of earth. They should be used at the borders of shrubbery, and they can be used in the woodland, but the flower is so large that they appear less harmonious than the native American varieties.

A. lutea; syn., **A. calendulacea.** This is named the Flame Azalea because in the Alleghany mountains, when in bloom, it looks as if the under-brush were afire. The colors are orange, orange-scarlet and yellow. It blooms in May after the Chinese and is a taller-growing plant. We have a group in the orchard 6 feet high and it seems perfectly at home there. An old orchard often forms part of the lawn, and in the semi-shade this and other Azaleas are very appropriate.



Azalea mollis on a lawn. This gives the greatest show in early May, but some of its colors are crude and it is surpassed in beauty by the earlier *Azalea Vaseyi* and the other later kinds.

Azalea, continued

Ghent. *Azalea pontica*. In England the choicest garden treasures are called "American plants," meaning the Azaleas, Rhododendrons and Mountain Laurel. The Ghent Azaleas include a long list of named varieties originating mostly at Ghent, Belgium, by hybridizing the *Azalea pontica* of Asia Minor with the American species, as *A. lutea*, *A. nudiflora* and *A. viscosa*. They include all the colors mentioned for the genus Azalea, frequently several colors harmoniously blended in one flower. Many varieties have double flowers. We have a quantity of old plants that have been growing on Long Island several years and are well established, which we dig with large balls of earth. A bed of Azaleas should hold equal rank with the rose-beds in a flower-garden. Our collection presents an unequalled opportunity.

Pinxter Flower (Wild Honeysuckle; Swamp Apple). *A. nudiflora*. This grows on Long Island with or near the Mountain Laurel. It is found on the crest of Harbor Hill where soil is rather dry and gravelly, and also on the slopes of the hills where there are springs at the base, as at Plandome, Oyster Bay, Cold Spring, Herricks, and many other places. It does not flaunt its beauty frequently along the road-sides on Long Island as upon the mainland where solid rock holds up the moisture. It is a graceful shrub, occasionally 5 feet high, with delicate pink blossoms.

White. *A. viscosa*. In passing swampy places, the pleasant perfume of this is often evident in July. It is the latest of the Azaleas to bloom. It is pure white, sometimes tinged with pink. The outside of the flowers have viscid hairs

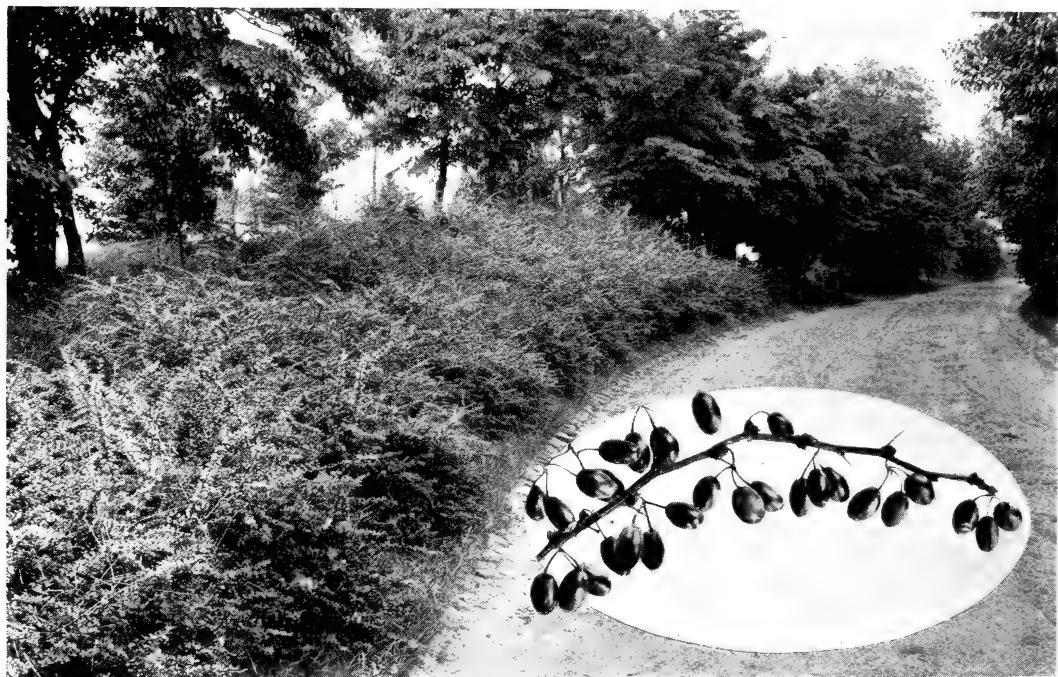
Azalea, White, continued

which catch insects. We offer old plants grown in the nursery for a dozen years.

Southern. *A. Vaseyi*. This was recently discovered in the southern Alleghanies and was named after Dr. Vasey, United States Botanist. In our opinion it is the loveliest one of all. The color is the most delicately shaded shell-pink. A few are nearly white. It is the first to bloom and, therefore, has no competitors. Our plants are probably the oldest that are offered, being well set with bloom-buds. Those having greenhouses should experiment with forcing it, for it is one of several beautiful flowers capable of relieving the monotonous product of commercial greenhouses. It grows well in the open, but would thrive in a moist semi-shaded position.

Barberry · Berberis

Japanese. *Berberis Thunbergii*. The Japanese Barberry is the most popular shrub and hedge plant from Newport north. It is becoming very popular here. It is not likely to be overdone, as the California Privet, because it is not quite so quickly propagated. It is hardy where the California Privet is not. It never gets thin at the bottom, in fact, it is the thickest and densest shrub at the base of any we know. It makes a low hedge and requires little or no trimming to keep it in presentable condition. That is a big cash saving as compared with California Privet. If left alone it will grow 4 feet high and 6 feet broad in a few years. It is not likely to grow tall enough to make a screen 8 feet high, as is often required of the Ibota or California Privet. On



The Japanese, or Thunberg's Barberry, has a dozen or more landscape uses. Here it holds a steep bank better and cheaper than grass. Its lights and shadows correspond with the Dogwood beyond. It exceeds the Dogwood in the persistence of its red berries, which remain till May, while the robins strip the Dogwood in November. Entrance drive of Mr. R. D. Winthrop, Westbury, L. I.

Barberry, Japanese, continued

the other hand, it is much more defensive than they. For its height, this is the best thorny hedge. For a taller thorny hedge, the Cockspur Thorn is best. In hedge planting, the Barberry can be put wider apart than the Privet and therefore reduce the cost. The lower branches extend horizontally close to the ground wider than any other shrub. Therefore it can be planted 2 or 2½ feet apart, while Privet is frequently planted in a double row 6 inches apart.

In the autumn the Barberry foliage will turn so red as to look like a bed of Salvia. For winter decoration the Barberry holds the color of its coral berries until covered by the new foliage and flowers early in May. In the desolate days of March, the Barberry will be the most cheerful note in the murky and bedraggled shrubbery. The practical uses of the Barberry in planting country estates are numerous. The edge of shrubbery should go solidly to the ground to give a neat finish and to screen the unkempt stems and bare ground of the taller shrubs. For this purpose, the Thunberg's Barberry stands preëminent. Of course, its exclusive use would lead to monotony in such situations. We recommend also for this purpose, *Deutzia gracilis*, *Forsythia suspensa*, Upright Honeysuckle, Indian Currant, Prostrate Privet, *Rhodotypos Kerrioides*, Thunberg's Spirea, *Spiraea Van Houttei*, *Stephanandra flexuosa*, Yellow Root and many others. Another use for Japanese Barberry is covering steep banks, at the side of a road, or clothing a hill. It will make a dense, even-topped thicket, needing absolutely no care when established, for even weeds will be shaded out and discouraged from pushing through the foliage. For game cover it has the necessary qualities of furnishing abundant berries and protection from enemies. At Harbor Hill, the estate of Mr. Clarence H. Mackey, Roslyn, a hedge of Barberry forms an elegant border to the stately entrance drive. Plant it against the foundation of a house where it is difficult to select shrubs which will thrive and maintain a dense, rounded form without getting too large. The original plant introduced into this country is at Bussey Institute, Harvard, and has the rounded surfaces and even, close growth of the old dwarf Boxwood. It is about 8 feet high and 12 feet broad. No insect or fungous enemies injure this species.

European. *B. vulgaris*. This is a common Barberry which has run wild through New England pastures and along the stone walls. It forms a tall, gracefully arching shrub, shaped like *Spiraea Van Houttei*. In autumn it is laden with long, grape-like clusters of red berries which are used for making jam.

Purple. *B. vulgaris*, var. *purpurea*. Since *Prunus Pissardi* has been abandoned because it is so seriously attacked by San José scale, this is the best purple shrub. The young shoots are bright red. It has yellow flowers and red berries.

Bayberry • Wax Myrtle*(Myrica cerifera)*

This is the most abundant shrub on Long Island in sandy ground exposed to the sun. For drought resistance it is unsurpassed. You have probably noticed in a drought the wilted appearance of the



Group of *Catalpa Bungei* of bush form, with Silver Linden in distance. This is in a small park we designed and planted on a bit of vacant public land at Hempstead for Mr. August Belmont.

Bayberry, continued

average shrub planting, for it must be confessed most shrubs in nursery catalogues are native either of swampy ground or under woods where they are protected from the fierce drying of full sunshine. Drought-resisting shrubs are the Elaeagnus, Hazelnut, Hypericum, Indigo Bush, Scrub Oak, Dwarf Chestnut Oak, Cockspur Thorn, and the Sumac family. Bayberry is a rounded, compact, dark green bush, 3 to 6 feet high, with white berries from which wax candles are made. Recommended for seaside, bluffs and dry knolls and road banks.

Button Bush

The shrub that will endure the deepest water. In the small ponds, the kettle "holes" left by the glacier on the hills of Long Island, this shrub grows. In spring it is covered a foot deep for several weeks, and yet it thrives equally well on upland and makes a handsome, round bush, perhaps 6 feet wide, with leaves as dark and glossy as a Rhododendron. The name originates from the pendant white balls which appear in July.

Catalpa

Catalpa Bungei, Bush Form. *Catalpa bignonioides*, var. *nana*. A shrub that has not been known to flower; however, it has good foliage value, especially at the seaside. It makes a large, round bush, 6 to 10 feet high, with larger foliage than any other shrub, the leaves being about 7 inches wide. It is benefited by occasional cutting back. We have a stock of uniformly trained domes suitable for formal planting or for immediate effect on seaside lawns.

Chokeberry*(Aronia nigra; syn. Pyrus arbutifolia)*

This shrub is largely used by some landscape planters for its red and black berries. It grows wild on the sand dunes and other sterile places. From its irregular and open growth, it is best used in large masses at the background.



Deutzia Lemoinei, showing the value of it and its parent, *Deutzia gracilis*, as a low shrub to edge down groups of taller shrubs.

Cochchorus • Kerria Japonica

In old-fashioned gardens this was a favorite, and rightfully so. For a long period in the summer it is decorated with brilliant golden balls about $1\frac{1}{2}$ inches in diameter. It is not a large or massive shrub but forms a graceful little plant about 3 feet high, with bright green stems.

Deutzia

For making up a bulk of tall shrubs, the Deutzias rank with the Viburnum, Cornus, Mock Orange, Weigela and Lilac. The two following varieties are quick to grow, handsome in foliage and showy when in flower and should be used for forming tall screens, their ultimate height being about 10 feet.

Deutzia crenata. The flowers of this are pure white pendant bells in upright racemes. When in bloom it is a tall and gracefully arching shrub, but as the lower branches may be bare, it is best to plant the lower-growing varieties in front. June.

Pride of Rochester. In this the flowers are striped with red on the outside of each petal, giving a distinct color effect in its season of bloom in June.

Dwarf. *D. gracilis*. This is largely forced for Easter blooming. Its flower effect is just as pretty in the shrubbery or flower garden. It forms a mound perhaps 3 feet high, of delicate pure white flowers as graceful as Lily-of-the-Valley. May.

Deutzia, continued

D. Lemoinei. A hybrid of the latter, with more vigorous growth and larger flowers, well worthy of the name of the famous horticulturist for whom it was named. It is a welcome addition to the short list of shrubs suitable for edging down taller shrubs and trees.

Dogwood • Cornus

The name, Dogwood, first brings to mind the White Dogwood (*Cornus florida*), with its large, butterfly-like blossoms in May, which is described on page 15, under Trees. The species here described are shrubs of decided value in decorative planting, those with red bark filling a place occupied by no other.

Red-twigg'd. *Cornus alba*, var. *Sibirica*. This has deep, crimson bark and it should be used in large groups for its winter effect, as it shows off best when there are a number of plants together. Abundant clusters of small white blossoms are borne in early summer, followed by white fruit.

Cornus sanguinea. This resembles the last and has darker red bark.

Panicled. *C. paniculata*. In damp or rocky ground this makes a thicket of slender brown twigs that are so numerous and dense as to give a pleasing color tone even in the winter. The clusters of small white flowers with slender pointed leaves, and the ornamental white fruit, are all of good landscape value.

Elder

Common. *Sambucus Canadensis*. A familiar roadside shrub, always healthy and vigorous, with immense panicles of white blossoms and purple fruit. It will make a dense thicket the first year.

Golden. *S. nigra*, var. *aurea*. For those who like golden foliage, this is attractive in early summer.

Marsh. *Baccharis halimifolia*. We are often asked what shrub will grow near salt water. There are many of them, but this will grow the nearest, for its favorite habitat is where its roots are covered at high tide. The plants, having fertile flowers, are very ornamental in the autumn with a white down, which is different from any other shrub and is conspicuous when no other shrubs, except Witch Hazel, are in bloom. (See page 33.)

Elaeagnus

Elaeagnus umbellata. Silver Thorn. It used to be taught that only plants of the pea family (Leguminosæ) had the power of gathering nitrogen from the air. The behavior of *Elaeagnus umbellata* in this nursery appears to indicate the truth of the statement that this plant can also do so through partnership with a fungus on the roots. It grows very vigorously, even in poor, sandy ground, and other shrubs near it are as dark green and vigorous as if they were adjacent to a supply of fertility, while those at a distance are yellowish and of short growth, indicating lack of nitrogen.

It is a tall, arching shrub, 10 feet high and broad, with pungently fragrant flowers and

Elaeagnus umbellata, continued

silvered foliage. It is a suitable shrub for seaside planting. In Japan the children go about nibbling branches of the sweet red berries which here are attractive to the birds and poultry.

E. longipes. Introduced a few years ago as a fruit of the cranberry and currant class. It is a showy berry-bearing shrub in early July. The fruit is over $\frac{1}{2}$ inch long, brilliant red and pleasantly acid when ripe fully. It grows about 4 feet high. We have an unusual stock of old plants.

Exochorda • Pearl Bush

Exochorda grandiflora. A rare shrub of great beauty. The pure white flowers are so abundantly borne as to cover the plant. They are about $1\frac{1}{2}$ inches in diameter, in long, pendent racemes, appearing with the foliage in May. It is a tall shrub, attaining 10 feet, but as it is rather awkward in shape, it is best at the background of a group.

Forsythia • Golden Bell

The Golden Bells stand in a class by themselves, and, with the Magnolias, are the first showy shrubs. Early in April they are a wealth of brilliant golden yellow. In one of the Boston parks there was a gravel pit that has been transformed to such a thing of beauty that many make a point of visiting it. The foliage is entirely healthy and the growth vigorous. Beautiful winter bouquets are made by standing the twigs in water in a window where it comes in bloom in a few days.

Forsythia Fortunei. *F. suspensa*, var. *Fortunei*. A tall, arching shrub, reaching 10 feet in height.

F. suspensa. Almost indistinguishable from the above, except that the slender branches hang

Forsythia suspensa, continued

perpendicularly from old plants. It is excellent for bordering groups of shrubs.

F. viridissima. The foliage and habit of this is very distinct, being more like the California Privet in its upright, vigorous growth and glossy dark green foliage, retained late in autumn when it turns to a purple shade. The flowers are slightly smaller than the two above species and it also differs in hardiness. The tips and flower-buds were winter-killed in the unusually severe winter of 1903-04.

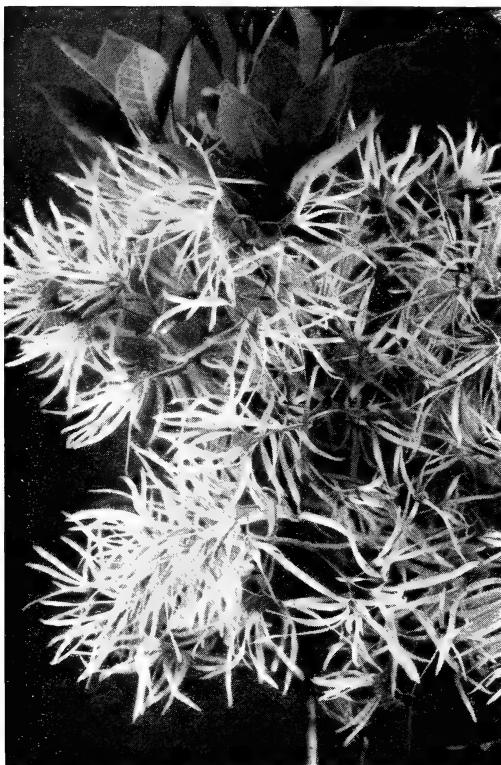
Fringe

White. *Chionanthus Virginica*. An Indian rubber plant outdoors. There is no other hardy shrub resembling it and yet it harmonizes with other planting, being native from New Jersey southward. It grows to a height of 15 feet or more and has a sturdy, enduring appearance. It has hitherto been rare in cultivation and used as single specimens. Now that we offer it in large quantities, it should be used extensively in border plantings the same as the Dogwood tree and the large-growing shrubs. It is free from insects or fungous attacks and its luxuriant, dark and handsome foliage gives a touch of elegance not contributed by the average shrub.

When in blossom in June, the tree appears as if it were festooned with the most delicate white lace. It is only occasionally that a bargain like this is available, as the seed crop is irregular. Those who take advantage of it will be proud of their White Fringe Trees. There are many such bargains in this Catalogue, where valuable stock is offered at lower rates than usual, and lower than they are likely to be in the near future.



The problem of planting along drives in the forest is here solved by using *Forsythia suspensa*. On the road from the residence of Mr. Harry Payne Whitney to Harbor Hill



The *White Fringe* flowers are only a part of its beauty. The dark green massive foliage and sturdy growth give it a dignity surpassing most shrubs. It has been so rare that it has been used as an isolated specimen, but it is best in large groups. With the *Magnolia glauca* it will make harmonious and rich plantations about Long Island water-courses and on upland.

Hazelnut

American. There is no reason why the shrubby should not bear some useful fruit or nuts, provided the foliage is healthy and harmonious. Copses of Hazel are beautiful, even in winter, with their even-tinted haze of twigs. This species is native in dry and rocky ground. Every country boy ought to know how to get ahead of the chipmunks in gathering them in early September. A group on the lawn will give his suburbanite brother an opportunity to do the same. The Japanese Chestnut is free from the Chestnut disease and can also be used as a tall shrub.

Honeysuckle • Lonicera

The Upright, or Bush Honeysuckles, are a class of shrubs of the highest usefulness. They are always healthy, vigorous and of good form, sturdy and strong in appearance, and well clothed with foliage to the base. We have grown them in large quantities and offer them very low. We feel certain you will receive more than full value for the price.

Upright. *Lonicera Tatarica*. When in bloom in early summer this is one of the handsomest shrubs, covered by delicate pink and white blossoms. In August it is

Honeysuckle, Upright, continued

more decorative than any other red-berried shrub, with its translucent coral berries. It is a strong, clean shrub, oak-like in its branching.

Lonicera Morrowii. This Japanese species is very wide-spreading and is especially ornamental in flower and fruit. The flowers are pure white, changing to yellow.

Fragrant. *L. fragrantissima*. One of the earliest spring-blooming shrubs, pushing forth both its leaves and pink flowers in early April. Some foliage remains bright green until midwinter.

L. Standishii. Frequently the snow-storms of early March will cover the strongly fragrant yellow blossoms of this shrub.

L. Maackii. Probably this is here introduced for the first time in this country. It has been recently discovered in western China. Its pure white flowers are larger than those of the other upright Honeysuckles and the leaves larger and darker green.

L. Philomela. A vigorous, upright shrub, with pendant pink blossoms in April.

Horse-Chestnut • Aesculus

Dwarf. *Aesculus parviflora*; syn., *macrostachya*. There is a period between the June-blooming Spireas, Upright Honeysuckles, Mock Orange, Magnolias, Deutzias, etc., and the late summer-blooming Hydrangeas and Altheas, which this shrub fills to perfection. The tall, feathery spikes of bloom are the embodiment of gracefulness. It is a shrub ultimately 8 feet high, but rather slow to attain this height and also difficult to propagate; therefore its rarity in nursery catalogues.

Hydrangea

The Hydrangeas are all conspicuous from mid-summer to autumn. They are shrubs of moderate height to be used in the foreground or in beds by themselves. Their popularity is well deserved for their freedom of growth and healthfulness. The most popular is *Hydrangea paniculata grandiflora*, with its immense heads of white flowers. Those



Upright Honeysuckle in Arnold Arboretum. This exhibits about all the good qualities of a shrub for extensive planting. It has oak-like strength of branches and massing of lights and shadows in the foliage; beautiful, fragrant flowers, and bright red berries. We have a large quantity of broad plants at low rates.

Hydrangea, continued

whose knowledge is limited to this variety, and those who have become tired of it, should try some of the other kinds.

Hydrangea paniculata, var. **grandiflora**. The solid white flower clusters are sometimes nearly a foot long. The largest flowers may be secured by cutting down each winter to 6 inches, and strong shoots 3 feet high will be formed. This variety is often used in large beds on a lawn where they can be planted about 4 feet apart,

H. paniculata. This is the wild form from Japan, making a sturdy shrub 10 feet high, with graceful, open panicles of flowers. It is destined to become more widely planted, especially by those who already have the variety Grandiflora, and who wish a plant less artificial and common in appearance. There are two kinds of this wild form, variety *Præcox*, or early-flowering Hydrangea, blooming in July, and therefore much extending the season, and variety *Tardiva*, blooming in August.

H. Hortensis, var. **Otaksa**. This is the kind most commonly grown in tubs; usually such a puzzle as to whether the flowers will be pink or blue. This depends upon the soil, and there are some regions of Long Island where most of the flowers are pink, in others blue. In Newport they are grown outside and the tops bent down or boxed and covered with soil for the winter. Many peo-



Dwarf Horse-Chestnut on the lawn of the late John D. Hicks, Westbury, L. I. This is the most magnificent flowering shrub of its season in mid-July. It is rare in nurseries, but we have succeeded in working up a stock of it.

Hydrangea Hortensis, continued

ple ask us why their plants do not bloom. It is because the upper buds of the previous year's growth have been cut off or winter-killed. We have a number of old plants that have been wintered for several years in the cellar and will give showy effects from June till October.

H. radiata. A conspicuous plant in the shrubbery from the silvery white lining to the leaves, which shows when stirred by the breeze. The flowers are white, in flat-topped clusters. It grows about 4 feet high.

Oak-leaved. *H. quercifolia*. One of the rarest and most beautiful species, with graceful, open panicles of white flowers.



Hydrangea paniculata, not the variety *Grandiflora*. This is more graceful and beautiful, though less showy than the better known variety *Grandiflora*, which has solid heads of white flowers. More attention should be given to the flowering and berry-bearing shrubs that have decorative value from midsummer through the autumn.

Hypericum

Hypericum aureum. A low shrub about 3 feet high, thickly studded with golden yellow flowers.

H. densiflorum. A smaller shrub with smaller and more numerous flowers.

Indian Currant • Coral Berry

(*Symphoricarpos vulgaris*)

A graceful shrub, about 2 or 3 feet high, with deep red berries clustered and crowded along its arching twigs. The branches take root where they touch the ground and therefore are useful to hold steep banks and edge groups of tall shrubs in the same manner as Thunberg's Barberry.

Japanese Judas

(*Cercis Chinensis*; syn., *Japonica*)

The old-time Japanese Quince has been a universal favorite with its brilliant red flowers early in May. The San José scale attacks it so seriously that it should be discarded and the Japanese Judas and the Red-flowering Dogwood used for red flowers in the same season. This Judas forms a broad shrub 8 or 10 feet high. The branches are thickly studded with rose-pink, pea-shaped blossoms more brilliant in color than the American Judas tree.

Laburnum • Golden Chain

Laburnum vulgare. This is an old-time favorite in this country as well as in England and the continent. It forms a tall, slender shrub of no particular value as a screen, but winning admiration for its long, pendant, golden flowers, resembling its relative, the Wistaria, and the Yellow Locust. The Germans call it Golden Rain. It should be planted to rise out of groups of other shrubs. It blooms in May.

Lilac • Syringa

The Lilacs are immediately thought of as flowering shrubs by those least initiated in garden lore. The new varieties show a wide range of exquisite colorings and variation in size and form of the flower trusses.

Common. *Syringa vulgaris*.

This and the White are the old-time favorites. Their fragrance is unsurpassed by any of the newer varieties and they will always retain the strongest hold upon the affections. The mildew, which sometimes gives a dusty appearance to the foliage, is not serious. It is not conspicuous if the Lilacs are planted behind other shrubs that about equal them in height. Old plants attain a height of 12 to 15 feet, but they grow moderately when young, and should not be depended upon for screen planting on a new place.

White. *S. vulgaris*, var. *alba*. This has pure white flowers and can be distinguished even in winter by its white buds.

NAMED LILACS

We have a large number of varieties which we have propagated on their own roots; therefore, there will be no trouble from the sprouting of the privet stock, and the sprouts which do come up will be of the same variety.

Ludwig Spaeth. Deep purplish red flowers in dense, large panicles. The best of its color.

President Massart. Red when in bud, purple when open, with large panicle.

Emile Lemoine. Rosy lilac, very large double flowers. Clusters of globular form.

Mathieu de Dombasle. Double flowers; color reddish mauve.

Virginalis. Large pure white flowers in larger panicles than the original white.

Named Lilacs, continued

Frau Dammann. This is one of the best white Lilacs, having immense panicles. The foliage is vigorous and healthy.

Senateur Volland. Double; rosy red.

Louis Henry. Double; red-lilac, tinted blue; large panicles.

Insignis rubra. A large truss which is dark red when in bud and lilac when open.

Madam Jules Finger. Large double pink flowers.

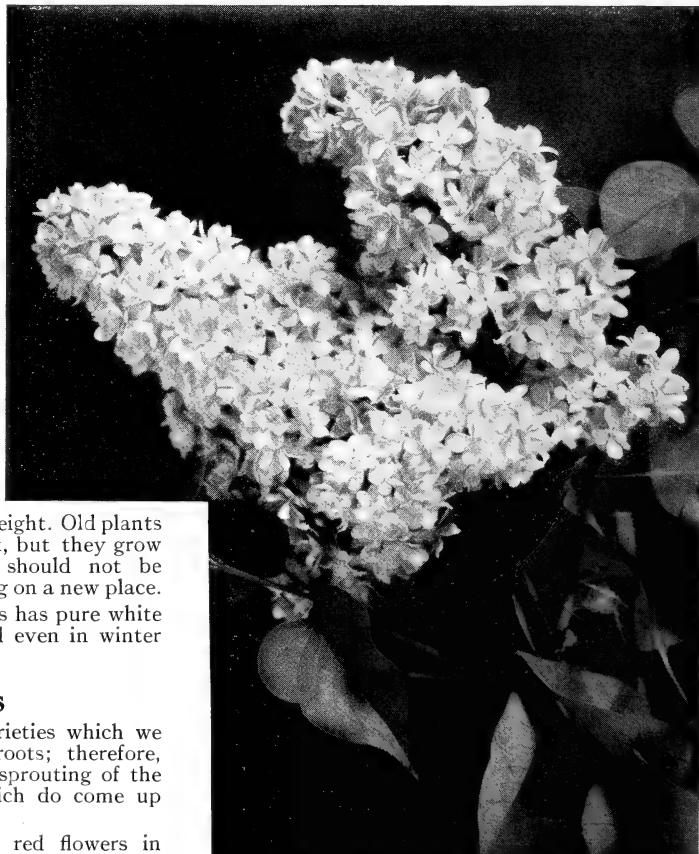
Belle de Nancy. Flowers bright red, with white center. A new and distinct color; double.

Ville de Troyes. Large panicles of dark purple flowers.

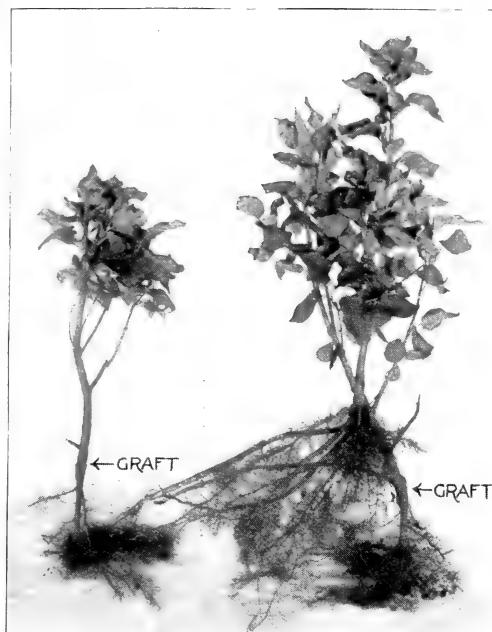
Madam Lemoine. This we regard as one of the handsomest double white Lilacs, the individual flowerets being as large as a ten-cent piece.

President Grevy. Beautiful lilac-blue; very double-flowered and very long panicles.

Pyramidalis. Panicles which are dense; carmine in bud.



The Double Lilacs were introduced in this vicinity by the late Adolph Ladenburg through the Oasis Nursery Company. Their stateliness and beauty are but little known. We have worked up a large stock of them on their own roots which are not subject to the failures incident to most imported plants. Our plants are old and ready to bloom and are offered much lower than usual.



We grow the Named Lilacs so that they are permanently vigorous. As shown on the right, it has roots above the graft. The plant on the left will die in a few years.

Named Lilacs, continued]

Virginity. Flowers large, double; delicate rose-color.

Madam Casimir Perier. A double Lilac, with large and compact panicles of the purest white. A new variety highly recommended.

The following are distinct species, quite different in flower and season of blooming from the Common Lilac and its varieties described above.

Syringa villosa, var. Emodi. A vigorous, upright shrub, with large, healthy leaves, resembling the White Fringe, fitting it for screen planting. It has immense panicles of white flowers.

Japanese Tree. *S. Japonica*. This blooms a month later than other Lilacs, having privet-like flowers in a bunch a foot wide. It is a tall shrub or small tree.

Persian. *S. Persica*. An old favorite, with slender arching branches, differing from the upright growth of all the other Lilacs. The flowers are of lilac color and very fragrant. They are borne all along the branches, bending them down in graceful curves. It can be used as a border to groups of other Lilacs.

Japanese Maples

The Japanese Maples contribute a refined note that cannot be duplicated by any other class of plants. There is often the question of what to do on small lawns where something is desired less coarse and vigorous than the average shrub, and which will be attractive all the season. This can frequently be answered by planting Japanese Maples, Rhododendrons, Thunberg's Barberry, *Magnolia stellata*, Dogwood, Rhodotypos, Thunberg's Spirea, Boxwood and similar small-growing plants.

Japanese Maples, continued

Japanese. *Acer palmatum*. We were fortunate in securing a large quantity of seedlings where they grew up in a carpet of English Ivy, and are offering them at a decided bargain. The foliage is of small, delicately cut leaves, tipped with red on the young growth in autumn. They will grow about $1\frac{1}{2}$ feet per year and make shrubs 8 to 12 feet high. They can be very appropriately used in the shrubbery, for tall screens and backgrounds and to edge down groups of tall trees. The other varieties of Japanese Maples may be appropriately used in front of these.

Blood-leaved Japanese. *A. palmatum*, var. *atropurpureum*. This is the variety most people think of when they speak of Japanese Maples. It is very conspicuous for its bright red colors in early summer, later changing to dark red. It ultimately forms a bush 10 feet in diameter or more, and is frequently planted as a single lawn specimen.

Cut-leaved Japanese. *A. palmatum*, var. *dissectum*. This is as delicate as a maidenhair fern. Its branches arch downward and it never makes a high shrub. For a succession of pretty details, plant this and the next.

Cut-leaved Purple Japanese. *A. palmatum*, var. *dissectum ornatum*; syn., *atropurpureum*. A duplicate of the above, except that the foliage is a good red color throughout the season.

Golden Japanese. *A. Japonicum*, var. *aureum*. A dwarf plant of perhaps 3 feet high, with clear yellow foliage.

Tartarian. *A. Ginnala*; syn., *A. Tataricum*, var. *Ginnala*. This is one of the best plants for autumn color in our Nursery. It turns rather early in the autumn just after the Virginia Creeper and Dogwood change. The color is not exceeded in clearness and transparency by any other autumn foliage. It quickly forms a tall screen 12 to 15 feet



Group of Japanese Maples in the garden of Mrs. Robert L. Stevens, Westbury, L. I., Daniel Langton, landscape architect. We have a large stock of Japanese Maples permitting their economic use for extensive planting.



Tartarian Maple on the same estate as the Japanese Maples illustrated on page 61, forming a screen to the service entrance. Early in autumn it is the most brilliant and clear red of any foliage on the estate. It grows quickly to the size shown. It is an excellent shrub for such mass planting, harmonizing with native growth or with the delicate Japanese Maples. The two Oaks appearing above the shrubs have grown twice as fast as those in the grass.

Japanese Maple, Tartarian, continued

high and keeps in healthy and vigorous condition, being hardy far north of this latitude. Its foliage harmonizes well with our native Oaks and Maples on one hand, and with the delicately cut-leaved varieties of Japanese Maples on the other. Therefore, it is as useful as the Dogwood in fringing woodland and excellent to form a background to Japanese Maples and flowering shrubs. For hedges it is well adapted, and is one answer to the frequent request for a hedge that is not Privet and yet equally rapid in growth.

Orange, Hardy
(*Citrus trifoliata*; syn., *Limonia*)

A new hedge plant of value from here southward. On a sandy hillside at Westbury, plants have grown 8 feet high and 4 feet broad. It is such a thickly interlacing mass of needle-tipped thorns that a cat could not get through, and even a snake would have to use caution. It is hardy where it makes a moderate growth and the wood is well ripened. If highly manured it will make a late growth and the tips winter-kill.

Privet • Ligustrum

California. *Ligustrum ovalifolium*. This needs no description. The foliage is a dark, waxy green, the growth vigorous and able to withstand or overcome quickly widely varying conditions, and is more rapidly increased in quantity than any other shrub. At the seaside it is the most popular shrub that nurserymen offer. Its popularity as a hedge plant is undiminished. The natural habit of the plant is V-shaped, and therefore

Privet, California, continued

hedges are liable to be thin and open at the base unless properly started and pruned. It is best to plant 6 inches deeper than it stood in the nursery. This results in several stems at the ground level. It should be pruned so that the base is wider than the top, then the sun shining on these lower branches encourages their growth and keeps the hedge thick at the bottom. Privet is frequently called for to make immediate, tall screens on account of its dense growth and habit of holding foliage late in winter. We have large, old plants, 6 to 9 feet high, suitable for this purpose.

Dome-shaped California Privet. We have trained plants about ten years old in the form of a hemisphere, solid at the base. They are 6 feet high and 7 feet broad and eminently suitable to plant on a large terrace, in a formal garden or lawn. They have been accurately trimmed with a mechanical form of our invention which makes them uniform and dense.

Standards of California Privet. These are trained by the same machine as the last. They have a stem 2 to 6 feet high and a head 2 to 4 feet in diameter which is flat at the base, symmetrical and dense. They can be used for formal garden, terrace, or planting in tubs, similar to Bay Trees.

Arches of California Privet. These arches consist of two plants trained to an iron form 8 feet high and 8 feet broad. They are suitable for the center path of a flower-garden or for arching a gate to a garden or lawn. Another way to use them in garden design is to put them end to end, forming a series of arches, making a partial screen to two portions of a garden. These have been trained for a number of years and are mature and solid in effect.

Privet, continued

Ibota. *Ligustrum Ibota.* From New York northward, especially inland and about Boston, this Privet is rapidly taking the place of the California Privet because it is perfectly hardy. The California Privet winter-kills to some extent here in severe winters, but as it jumps up 3 feet by mid-summer, that fault is forgotten. It is native to the coast of Japan and thrives best along the coast here. The Ibota Privet is similar to California Privet in rapidity of growth, habit and density of foliage. It is, however, not quite so dark green in color. It holds its foliage with a bright green color till late in autumn, while the California Privet turns to a bronze-green and holds it farther into the winter. We are endeavoring to introduce this Privet into extensive culture, believing that it is superior to the California Privet where a tall hedge or mass of shrubbery over 6 feet high is wanted with no risk of winter-killing.

Prostrate. *L. Ibota*, var. *Regelianum*. This variety has all the good qualities of the latter and, in addition, has a very distinct habit of growth. The branches arch outward and down to the ground in graceful curves. It is an excellent shrub for bordering groups of taller kinds, usually bare at the base. As a hedge plant, it is destined to become much admired because of its graceful form and ability to keep dense at the bottom. It can be left untrimmed and make a



These *Domes of California Privet* are prepared for immediate results on a large terrace or in a formal garden or elsewhere. They are grown from one plant and have taken several years of skilful training to reach their present development. (See page 62.)

Privet, Prostrate, continued

handsome, dense hedge 5 feet high and 6 feet broad. It will attain those dimensions slightly quicker than the Thunberg's Barberry, the two being similar in form.

Media. This is a shrub about 5 feet high, of dense, round habit and chiefly notable for the ornamental value of the large black berries. It can be used to advantage in shrub planting and we offer it at low rates.



Rhodotypos Kerrioides (White Kerria). An excellent shrub for general planting, being not unlike the Prostrate Privet in its arching growth. It has pure white flowers like the Mock Orange, scattered through the summer. The illustration shows it at the entrance to the residence of Mr. Albert Francke, Lawrence, L. I., showing how excellently it fills down to the ground under the Plane tree.

Rhodotypos • Kerria

The White Kerria would be as popular as the Mock Orange, Weigela and Golden Bells if its merits were known. It has large white flowers an inch or more across in early summer. The flowers closely resemble those of the Mock Orange, Syringa or Philadelphus. It is decorated all winter by clusters of four shining black berries. In foliage and habit it is one of the best hardy shrubs in this latitude. It is about 5 feet high and broader in growth, being full from the base where its gracefully arching branches touch the ground. It is a shrub that can be used in quantity in large groups, or a single plant will be admired on grounds of small area.

Siberian Pea-Tree

(*Caragana Arborescens*)

A dainty little tree, slower in growth than the Dogwood. It is thickly hung with canary-yellow, pea-shaped blossoms in late spring.

Smoke Tree • Mist Tree

Purple Fringe (*Rhus Cotinus*)

This differs so widely from all other shrubs that a foremost landscape architect declines to use it because of its inharmonious relation to other plants. Its beauty consists in the downy masses surrounding the seeds in mid-summer, and apparently enveloping the tree in puffs of smoke.

Spirea

This is one of the largest groups of flowering shrubs and it is rarely that a group is planned without including some of its widely differing forms. We have endeavored to select, among the many kinds, the few which most clearly show the different types of beauty, without confusing our customers with an unnecessarily long list of names.

The flowering period is more extended than that of any other group of shrubs. Their foliage is attractive at various seasons.

Thunberg's. *Spiraea Thunbergii*. This is the most feathery of them all and the earliest to bloom.

In April or early May it is a fleecy mass of small, snow-white blossoms. During the summer its foliage is attractive from the lights and shadows of its rounded masses. Early in autumn the slender, willow-like leaves change to various shades of orange and red, making it suitable for interior decorations. The general habit is low and broad, with good foliage at the ground. It therefore combines well with the Thunberg's Barberry and other low shrubs for edging taller groups.

Bridal Wreath. *S. prunifolia*, var. *flore pleno*.

This old-time favorite is the next to bloom. Each flower is a minute double white rose in form. The foliage is bright, glossy and dark green. During severe drought some foliage falls.

S. Van Houttei. The most beautiful of the Spireas.

We recall no shrub that exceeds this in the graceful Elm-like quality. The graceful branches, weighed down with a wealth of white blossoms, curve till they touch the ground. It comes into bloom just before Decoration Day. If we were limited to one Spirea, we should select this. It grows to about 7 feet high and equally broad.

S. Reevesiana; syn., Cantonensis, var. flore pleno. This closely resembles the last except that the flowers are double like the Bridal Wreath, and it is not quite so hardy.

S. opulifolia; syn., Physocarpus opulifolia; Opulaster opulifolius. A big, coarse, quick, cheap shrub. It will make bulk as quickly as any shrub on our list, a one-year cutting being 3 feet high and broad. It attains a height of about 10 feet and has a wider spread. It has white flowers in June, followed by reddish pods. In large plantations, it may be used to grade off from the plants of finer quality near the house to the trees.

Golden. *S. opulifolia*, var. *aurea*. Similar to the last; the foliage bright golden yellow in May, but later changing to green.

Anthony Waterer. *S. Bumalda*, var. *Anthony Waterer*. A comparatively recent introduction that is distinct from all the others. It is a low shrub of about 3 feet high, its flat top covered with carmine flowers from early July onward. To keep it in continuous bloom, cut back some of the plants at various times from June till August. Cutting back after its first blooming has the advantage of removing the unsightly seed-pods, which are the only drawbacks to some of this genus.

S. Bumalda. This resembles the last except that the flowers are pink.

S. callosa alba. This resembles the two previous varieties in form, but has pure white flowers during the summer.

S. Billardii alba. A shrub about 5 feet high, with white finger-shaped spikes of flowers in July. It should be planted at the rear of other shrubs.

Stephanandra

Stephanandra flexuosa. Another shrub that would be well known and much liked if it were not blighted by a long name. Its proper use is illustrated at some of the stone gateways on Dosoris Lane, Glen Cove, where it is used to edge the taller shrubs. While totally distinct from the Thunberg's Spirea and Barberry, it belongs to that class in landscape composition. It has small, finely cut leaves, growing thickly on gracefully arching sprays. The small white flowers are in clusters and appear in June.

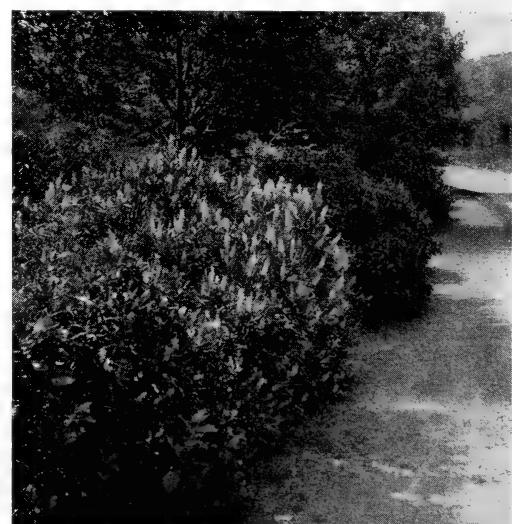
Styrax

Styrax Japonica. We have grown a large stock of this beautiful little tree. It forms a dense, compact pyramid of foliage and should be used extensively with plantations of shrubs. The blossoms—its greatest charm—are delicate orange and of delicious fragrance, borne in July.

Sumach

The Sumachs listed below are all natives of dry ground, and they are preëminently suited for planting where the ground is dry, and it is not practical to manure or to cart any better soil. Their brilliant autumn colors are but little appreciated, but as our wild lands become taken up and they appear less common as a wayside weed, they will attain their just consideration in the planted landscape.

Smooth. *Rhus glabra*. The commonest species on Long Island, growing on abandoned hillsides to a height of about 10 feet. It can be easily kept to a lower height by cutting back, when it will make a very vigorous growth the same year. Its large, hand-shaped clusters of red berries are highly ornamental. The foliage is the first to turn in the autumn. There is use for it in many large plantations. It can be used with evergreens and White Birch for its brilliant colors. Its shade is not dense enough to harm the young evergreens.



The Sweet Pepper Bush, or *Clethra alnifolia*. We have a stock of mature shrubs of this size which transplant readily and will give this result the first year. (See p. 65.)

Sumach, continued

Shining. *R. copallina*. This is a smaller and more compact-growing species, fitting it for use on smaller areas than the Staghorn. The leaves are dark green and shiny, turning deep red in autumn. It can be easily distinguished from the other native Sumachs because it has a wing of foliage along the mid-rib of the leaf.

Staghorn. *R. typhina*. This grows to a small tree or may be cut back when it will sprout up as vigorously as an Ailanthus. Its bark is covered with short down like a stag's horn when in the velvet.

Staghorn, Cut-Leaf. A recent introduction with delicate fern-like foliage.

Rhus semialata, var. *Osbeckii*. This tree from Japan has conspicuous flowers in midsummer when such are scarce. It makes a small, flat-topped tree. The flowers are of pale yellow color in large clusters about 1 foot long.

R. aromatica. This is the dwarf of the family, growing on the brink of rocky cliffs, making either a low mat or a shrub 5 feet high. The small, trifoliate foliage is glossy green and turns a rich red in autumn.

Sweet-Scented-Shrub

(*Calycanthus floridus*)

It is said that perfumes linger longest in the memory, and it has been proven by the inquiries for "The shrub that they used to have when I was a boy, and smelled so sweet." The flowers are little rounded chocolate-brown buds with a strawberry-like fragrance. It is a shrub about 5 feet high, with dark green foliage, having no enemies. It is useful both as a single specimen by the door or in groups of shrubs.

Sweet Pepper Bush (*Clethra alnifolia*)

In driving by damp ground in July, the fragrance of this shrub is often noticeable. The white flowers in finger-shaped, upright spikes are conspicuous. While native to damp ground, it also thrives on upland. We have a fine stock of old plants 5 to 7 feet high which permit economical and immediate results.

Syringa • Mock Orange; *Philadelphus*

This old-time favorite is a tall shrub, 8 to 12 feet high, gracefully arching under the weight of large, fragrant white flowers. It has no serious enemies or defects and can be used largely where tall foliage is needed.

Tamarisk

This is preëminently suited for seaside planting. The slender, wand-like branches bend to the gale and the minute foliage is not injured by salt spray. They have tiny pink flowers in early summer.

Viburnum

An important group of shrubs. The two double varieties are the Snowballs. Members of this genus are conspicuous for possessing the good qualities needed in landscape planting. They have good healthy foliage, arranged in masses of light and shade that harmonize well with our native trees. The flowers are white and, while they are a conspicuous incident in the season, they are not over showy, and do not ask us to put up with



The *Viburnums* are nearly all big, round, solid shrubs of this form. Excepting the two double varieties, they have flat cymes of white flowers in early summer followed by black or red berries. They are largely used by the Boston group of landscape architects, who are in advance of others in the use of native plants.

unhealthy foliage or straggling growth the rest of the year. The berries are beautiful in their various seasons.

Viburnum acerifolium. Maple-Leaf; Arrowwood. This forms a shrub about 4 feet high, with shining black berries and clusters of white flowers. It can be used for large shrubberies and is especially valuable for planting in the shade where many other plants suffer for lack of light. It is native over large areas of Long Island in Chestnut and Dogwood forests. We have large quantities at low rates.

V. cassinoides. Withe-Rod. This is also a native, both to damp land and dryer upland. It is a graceful shrub about 7 feet high with light green elliptical leaves and white flowers, followed by black berries.

V. dentatum. Arrowwood. The most graceful of the family. Long, black branches, arching like the *Spiraea Van Houttei*. It grows to about 10 feet high.

V. dilatatum. This is a comparatively rare species from Japan. We were able to secure a large quantity of seed from the estate of the late Charles A. Dana, where it was planted when first introduced. It is a large, round, massive shrub, with the deep shade of green, characteristic of the California Privet and other shrubs of that region. The small red berries are in large clusters so thickly covering the tree as to make it very conspicuous. The birds do not eat up the berries as soon as ripe and so it can decorate the landscape for a long period.

V. lentago. This is a small tree or large shrub of a form similar to the Dogwood. It has sweet, black berries remaining through the winter.

Viburnum, continued

- V. molle;** syn., **V. Nepalense.** A native shrub, resembling *Viburnum dentatum*.
V. nudum. A graceful shrub, with slender branches and oval, bright green leaves.
V. Opulus. Highbush Cranberry. This handsome shrub is native in northern New England and Canada, where its large, bright red fruits are sometimes used as a substitute for the cranberry. It has large, healthy leaves, free from insect attacks, while the next variety is from Europe and has thinner foliage which is curled up by plant-lice.
V. Opulus, var. **sterile.** Common Snowball. This is the Snowball that decorated the old farm-yards beside the Peony and Lilac. It is a shrub of 8 to 10 feet in height, with a large globular cluster of white flowers, blooming about Decoration Day.
V. Opulus nanum. A little plant that may be used as a substitute for Box edging or in restricted areas. It is about 1 foot high and densely compact without flowers.
V. Sieboldi. This differs from all the others in its general appearance, being much larger in all its parts. The leaves are about 6 inches long, heavy and shiny. It makes a shrub about 15 feet or more in height and can be used with the small-growing trees of the Dogwood class.

We usually recommend it when Mountain Ash is called for. In colder climates the Mountain Ash is a favorite for its large clusters of orange and red berries. Here it does not usually thrive. This Viburnum has clusters of berries about 5 inches across in August and September, which are very showy. It is as yet rare and we believe you should take advantage of this opportunity to secure it.

- V. tomentosum.** This is a beautiful shrub from Japan with dark crinkled leaves. It is very showy when in bloom, its flat clusters of small flowers surrounded by large sterile flowers. It can be highly recommended for planting in large groups or for single specimens.

- V. tomentosum,** var. **plicatum.** This has the good foliage of the last, but has all sterile flowers in large spherical clusters like the old-fashioned Snowball. As its foliage is free from insect attacks and is darker green, it is superior to the old-fashioned Snowball. It is a shrub which can be appropriately planted as a single specimen near the house. It will become 8 feet high and broad. We were fortunate in securing a quantity of old specimens about fifteen years old, with good roots, that are suitable for immediate effects.

Weigela

Another of the large groups of ornamental shrubs that have come to us from Japan and China. The shrubs are all vigorous in growth, broad-spreading, dense, and have good foliage from the ground up. They are very quick to make a dense mass of foliage. In flowers, they are the most showy of their period with the exception of the Rhododendrons. They have been most successfully used with the latter to carry on the color effects at a greater distance in the Vale of Cashmere, Prospect Park, Brooklyn. Of course, they have not the refinement of the Rhododendrons, and should not be used close to them, but when seen at a distance farther down the valley, they combine to make up a beautiful picture against the dark background of tall forests and the open meadow beyond. The colors range from pure white through various shades of pink and yellow to deep red.

Weigela, continued

- White.**
Othello. Flowers carmine-red.
Weigela rosea. A beautiful shrub with rose-colored flowers.
Eva Rathke. A comparatively new introduction, widely advertised because of its very deep red flowers. It is a lower-growing shrub than the others.
W. lutea. This distinct species is native of rocky banks in this country. It forms a dense mass of about 6 feet in height, with dense foliage and yellow flowers. We offer large-sized plants at low rates.

Witch Hazel

This should be as famous for its beauty and usefulness as for its being the origin of the Pond's Extract of Witch Hazel. It is a big, vigorous shrub, occurring on banks and abandoned fields on the mainland, and occasionally native on Long Island. Among shrubs it has something of an oak-like character, with strong, upright branches and firm, rugose leaves. It is well fitted for underplanting between Oaks, Dogwoods and other trees or among shrubs to give greater stability to their appearance. It grows 10 to 15 feet high. It is the last of all flowers to bloom.

It is a surprise to catch a spicy woodland fragrance in mid-November and look about to find these star-shaped, yellow blossoms on the leafless stems. It is equally a surprise to be bombarded by the black, torpedo-shaped seeds which are fired a distance of 20 feet on warm autumn days. These seeds are produced from flowers of the previous year.

It is a rare shrub in cultivation, but it is so harmonious with our native trees that we have grown it in large quantities, and advise those who are establishing private nurseries for extensive landscape planting to buy several hundred of these cheap seedlings and grow them on for two years, when they will be ready to plant in permanent locations. It is a shrub having no serious insect or fungous enemies, and easy to transplant.

Willow • Salix

The Willow family contains several members that may be grown as shrubs and because of their quickness and certainty of success in transplanting, may be used for temporary planting, or on damp ground used for permanent planting.

Laurel-Leaf. *Salix pentandra*. This looks like a large shrub of California Privet, with leaves as glossy as if varnished.

Yellow-Bark. *S. vittellina*, var. *auraea*. This is a large, upright tree, which may be kept as a shrub by pruning. The foliage is brilliant in winter with its bright yellow color.

Japanese Pussy. *S. multineuris*. The earliest of all flowers, frequently blooming in February. They are favorites with the school children. The long, silky catkins are larger and more conspicuous than in the other Willows, so that it has a distinct ornamental value. It is a low-spreading shrub about 4 feet high, well calculated to hold stream banks, and is also suited for upland planting.

Yellow Root • Xanthorrhiza apifolia

This is largely used in the Boston Parkways where it grows about 2 feet high in even masses of light green foliage, excluding weeds and requiring no attention.



Rhododendron Catawbiense Hybrids bordering a path under Sugar Maples. The harmonious blending of the colors of Rhododendrons can be accurately accomplished from the descriptions in this catalogue. In such a situation as this, where the effect is primarily for the foliage, some of the hardiest and more abundant varieties, having lilac or purplish shades, can be used alone or with white. We suggest for these conditions *Album Elegans*, *Everestianum*, *Parsons' Gloriosa*, *Pres. Lincoln*, *Purpureum Elegans* and *Rhododendron Catawbiense*, the wild species. Remember, just leaves, that's all, is the essential in Rhododendron culture

Broad-Leaved Evergreens

The plants of this class may cost the most, but then they do the most. They decorate all the year, nearly all of them have beautiful flowers or brilliant berries, and many will grow in shady places unsuited for deciduous shrubs or hardy flowers. Many shun them, fearing that they are an expensive luxury and are liable to fail. The failures have occurred from planting the wrong varieties, which are, unfortunately, abundant and cheap. Other failures have occurred from lack of sympathy with their simple needs. Nearly all of them like a mulch of about 6 inches of leaves or strawy manure in the autumn, to remain on during the summer. Some of them prefer partial shade in the winter, such as they would get growing in the woods. However, the root-mulching is three-fourths of their requirements and the winter shade and protection from drying winds the other fourth. Architecturally, the broad-leaved evergreens are indispensable. They mask the hard line of the house foundations. Their rounded form and compact foliage and their ability to remain small and not outgrow the situation are all elements of this usefulness.

The climate and soil requirements of this class can perhaps be understood by looking at the map of zones of plant life in a physical geography. The warm temperate zone of broad-leaved evergreens extends through Washington southward. We are in the cold temperate zone of deciduous trees, and our broad-leaved evergreens have all come up from the south along the coast, so Long Island is more favored than interior points of this latitude. In Virginia and southward frost does not penetrate deeply and thawing days predominate. This is true on Long Island except in our occasional severe winters like 1903 and 1904, when some of this class are killed back.

The practical lesson is, mulch the ground so that sap can come up to replace that lost by evaporation; second, check the evaporation by partial shade, especially from morning sun, which too quickly thaws and dries out the frozen foliage. This shade is rarely necessary and is most useful from the middle of January to the middle of March. This shade is so rarely essential it should not debar any one from planting these plants. Shade can be provided by boards, evergreen boughs, straw tied loosely around the plants, or they may be planted on the north side of a building or under trees. We have made a careful and enthusiastic study of both these and the evergreen trees and shall be glad to help solve any problems in connection with their use. We are growing the plants that fit, not importing and selling unacclimated plants.

Andromeda • Pieris

Andromeda floribunda. A little gem that appears as if blooming all winter. The foliage is very hardy and looks as if it were accustomed to mountain-top exposure. It grows about 15 inches high. The flowers are upright panicles of tiny white cups which open in March.

A. Japonica. This is still more beautiful in flower. The long, pendent racemes are 6 inches long and look like sprays of Lily-of-the-Valley, which open in early March. Unfortunately, it is not perfectly hardy, but is in need of tying up with a few evergreen boughs in winter to protect the flower-buds and foliage.

Azalea

Azalea amœna. This can be largely used in this region if protected as above noted. Old plants seem to protect themselves. They spread out so broadly as to mulch their own roots. Some hypercritical persons might object to its color, claiming that it had a tinge of magenta, but plant it alone in a large mass and it is the most glorious color effect of its season, in early May. On a hazy day, or towards twilight, it glows with a brilliant carmine-color. Its small size fits it for a position in the flower garden, or it can edge a bed of Rhododendrons. Along woodland borders and added to a native growth of Mountain Laurel, it will take care of itself and harmonize with its surroundings. There is a famous hedge of it bordering a garden walk at Dosoris, that has reached

Azalea amœna, continued

a height of 3 feet and a spread of 6 feet. The winter color is a reddish bronze.

A. indica alba. This is a shrub of small habit, keeping its green foliage in the winter. Many people know it as the "Azalea that grows in Greenwood Cemetery, Brooklyn," where there are many large old plants. The flowers are pure white and as large as the individual flowers of the Rhododendron, and appear in May.

For other Azaleas, see Deciduous Shrubs, page 53.

Boxwood • Buxus

Boxwood illustrates how strong a hold plants can have on a migrating race. It was brought by the earliest Dutch and English settlers and planted in their dooryard gardens. It has been given from one neighbor to another and cherished as family heirlooms. The Boxwood about the old farmsteads and village homes on Long Island is almost invariably the dwarf variety; in many cases it has taken a century or more to grow.

We have developed successful methods of transplanting these old Boxwoods and have successfully moved plants 14 feet broad.

Explanation is often asked as to why Boxwood that has evidently been grown for half a century, has died recently. A very severe winter may kill the bark around some of the branches, and the following summer that branch will have a more yellow color and make a weak growth, but not die until the year later.

Boxwood sometimes has a yellowish color, especially where fully exposed to the sun. This is due to a minute red spider which makes narrow yellow lines on the leaf. It may be overcome by watering and manuring the plant.

Dwarf Box edging occasionally dies out in spots, especially where some rampant flower smothers it in the summer. It is well in establishing a Boxwood bordered garden to plant a reserved supply for replacing it, rather than to depend upon nurseries.

Tree Box. *Buxus sempervirens*. This is the species and form which grows most rapidly. It is trained in the shape of pointed pyramids and also in rounded bush shape. We have plants trained in broad domes 2 and 3 feet wide in the shape of a hemisphere.

Dwarf. *B. sempervirens*, var. *suffruticosa*. This grows very slowly and is principally used to form garden edgings about 5 inches high. It is best to trim it early in the summer so that the growth has time to ripen before winter. It may be protected by an inverted trough of boards left open at the joints to allow some light and air.

Standard Tree Box. *B. sempervirens*. These are little balls about 15 inches in diameter on a stem 1½ to 2 feet high. They can be planted in formal gardens or on terraces.

Daphne

Daphne Cneorum. Garland Flower. A small alpine plant growing about 8 inches high. The spicy fragrance of its deep pink flowers can never be forgotten. It blooms freely in May and continues during the summer. If it were native to this country it would have as strong a hold upon our affections as the Trailing Arbutus, which it resembles.



Euonymus radicans, an evergreen vine, on a gate post at the entrance to the residence of Mr. Emmet Queen, North Country Colony, Glen Cove. This species is still more valuable climbing the trunks of trees, where it branches out like the English Ivy and Poison Vine. The avenue is planted with alternate Red Oak and Norway Maple from this nursery. (See page 69.)



We offer an unusual opportunity to plant old, well-established Holly, and advise those who have the opportunity and patience to get a bushel of berries from the North, sow them, wait till the second spring for them to come up, and grow them about four years to get plants 2 feet high. Hedges and extensive plantings would then make a place famous.

Euonymus

Euonymus radicans and its varieties have been fully described under vines, page 75. They are useful as low shrubs and cover-plants. They are entirely hardy and worthy of extended use as edging for evergreen and deciduous plantations and other planting in a flower-garden.

Holly • Ilex

Ilex opaca. Fortunately, there is an American Holly that is hardy and can be used extensively. The English Holly is not hardy here. Holly is now found on Long Island at Rockaway Beach, Cedarhurst, Freeport, Deer Park, Fire Island, Crane Neck, Montauk, and many other places. It has been ruthlessly cut for Christmas decoration, especially the berry-bearing trees, which have been cut to the ground by those too lazy to climb and cut the branches. It thrives in both upland and swamp, and the principal reason that it is so rarely seen is because nurserymen have so few plants. The secret of success in transplanting it is to prune it severely and pick off all the leaves if planting without a ball of earth. Transplanting can be done in the spring. It is not practical to tell with young plants whether they will produce berries or not, therefore, buy several. We have a fine stock of plants that are eight to ten years old and are well established, bushy specimens.

Japanese. Ilex crenata. This has a beautiful color, rivaling the Boxwood. It grows to about 3 feet in height and makes a compact plant with a sprightly, irregular outline. The tips of the branches winter-kill, especially if it has made a rapid and late growth. Old plants grow more slowly and are harder, and this killing of the tips should not discourage its extended use. It may be planted at the base of house foundations, among groups of deciduous shrubs to give them winter interest and, from the appearance of the plant and its relationship to the Youpon of the Virginia coast, we would suggest its extensive planting along the

Holly, Japanese, continued

shore as at Southampton and the Rockaways. We have several thousand two-year seedlings which we offer cheap to some one who wishes to try this experiment, or to use them as a substitute for Box edging.

Inkberry (Ilex Glabra)

This shrub is native to moist ground on the south side of Long Island, growing about 3 feet high, with Boxwood-like foliage. Beautiful specimens can be seen from the railroad across the Water Works pond near Merrick. They are solid domes about 4 feet high.

There are many trees and plants growing wild which are excellent landscape material. Many fail to make collected stock thrive because they cut the roots short and leave the tops long, or because they do not understand the importance of selecting uncrowded individuals.



Leucothoe Catesbeiae. It is even more beautiful in foliage than the Laurel because of its long, arching growth. It will thrive in deep woods or add an interesting touch of winter color to a group of deciduous shrubs. (See page 70.)

Mountain Laurel · Kalmia

Kalmia latifolia. There are thousands of acres of this on Long Island under the shade of Oak forests. It will grow in the open sun, as evidenced by the thousands of plants on the top of Wheatley Hill on the estate of Mr. E. D. Morgan. Here they are massed in beds and sheared off to a height of about 2 feet and are exposed to all the winds and deep freezing that is possible. It blooms just after the Rhododendrons in the latter part of June and rivals them in brilliant effect. The colors range from white to deep pink. It should be used extensively for cover planting. It is appropriate for the flower-garden. The foliage maintains a good clear color all winter.

Leucothoe

Leucothoe Catesbeiae. *Andromeda Catesbeiae*. We have a fine stock of this plant, but it would soon be gone if it were not new and unknown. It is related to the Laurel and Rhododendron and has foliage like them, turning a ruddy bronze on the outer leaves in winter. The long, graceful sprays arch to the ground unlike any other broad-leaved evergreen and make it particularly useful for edging Rhododendron beds or carpeting the woods along roads and paths. The flowers are like little clusters of Lily-of-the-Valley, and appear in May.

In small gardens and city back yards the broad-leaved evergreens will prove the best solution, as they are showy in winter and are good smoke resisters.

Mahonia

This closely resembles the Holly in foliage, each leaflet being tipped with spiky teeth. It will thrive if given some mulching in the winter, and is particularly appropriate in a shady position.

Mahonia aquifolium. *Berberis aquifolium*. Oregon Grape. This has glossy green foliage in summer which is deep red during winter. It can be planted along the north side of the house or out among the shrubbery and will be particularly at home in a moist, shady situation, as along the edge of a swamp. In May it has showy yellow flowers.

M. Japonica. Unlike the last, this has light green foliage in the winter. It is a sturdy, upright plant about 4 feet high.

Berberis ilicifolia. A semi-evergreen shrub about 3 feet high. It should be included in plantations of shrubs for its beauty in early winter.

Myrtle · Periwinkle

(*Vinca minor*)

The problem of what to grow in the shade is a frequent one, and depends for its solution on the moisture in the soil rather than upon the degree of shade. Nearly all trees permit a successful growth of Myrtle under them. The exceptions are the Silver Maple, Red Maple, Norway Maple, Linden and Willows, when they are growing on dry upland. The reason is they are accustomed to abundant moisture in swampy land, and if they cannot get it



Bank of Laurel at Arnold Arboretum, Boston. Such effects have been made on Long Island without planting, by merely reducing the density of the forest cover, letting in the sunshine and greatly multiplying the flowers of the native growth, as near the stone bridge at Roslyn and at St. James, L. I.

Myrtle, continued

they will rob the surface and keep it so dry that it is nearly bare of vegetation. It will be possible to grow Myrtle under these trees in upland if the ground is fertilized or manured and can be given a little water during the severest drought.

Myrtle is most at home under the shade of Pines, Spruces, Firs, Oaks, Beech, Chestnut, Dogwood, Birch, Locust and the various shrubs. Another interesting use is as a border in the hardy flower garden where it will form a strip of the deepest green about 1 foot wide, similar to the English Ivy, but without any danger of winter-killing. It has run wild occasionally in the woods, indicating its successful use for bordering woodland drives. For terrace banks in formal gardens which slope to the north and west, or are partly shaded, it is beautiful. Under shrubs there is often a bare and unkempt appearance which Myrtle will remedy. Mulching with leaves under Rhododendrons is objected to because the leaves may blow out and litter the lawn. This will not happen if manure is mixed with the leaves and a row of Myrtle is planted along the border. One of the pleasures of childhood is the rivalry to bring in the first Myrtle or Violet blossom.

Double-flowering. *Vinca minor*, var. *plena*. The large, double purple flowers appear in spring and at intervals throughout the summer.

Variegated. *V. minor*, var. *variegata*. A variety with bright yellow foliage.

White-flowering. *V. minor*, var. *alba*. A rarer variety, with pure white flowers.



This was a mat of *Myrtle* south of an old farm-house under the Spruce trees. It was allowed to remain when the estate was improved, and makes a solid and even cover of the richest and darkest green winter and summer. View on the lawn of Mrs. R. L. Stevens, Westbury, L. I.

Rhododendrons

Rhododendrons rank with Roses, Magnolias, Orchids, as among the most refined, elegant and beautiful of flowers. It is the supposed difficulty of cultivation and lack of accurate knowledge among nurserymen and growers that accounts for the scarcity of this plant. Another reason for their scarcity is slow growth and difficulty of propagation, and, therefore, they are not forced on the market as Roses and other plants which can be grown in a year or two. They are plants which satisfy all the year around, therefore, even if they are high-priced, they will repay the investment.

The flowers of Rhododendrons are in immense clusters 3 to 7 inches long. The colors range through white, pink, cherry, rose, lavender, carmine and purple. Some discrimination in grouping the colors is therefore required. We have carefully studied this point and listed those which show a slight tint of purple. These shades are found in the hardiest varieties with the best foliage effects and, therefore, those having space for a quantity of Rhododendrons should use these varieties in a separate part, especially as they are the most abundantly available in nurseries.

The uses of Rhododendrons in beautifying the landscape are but slightly understood, because examples of them in large masses are so rare that people have not become accustomed to their possibilities. Another strong reason is the fact that so many people have been fooled by planting tender varieties. These have been most cheaply propagated and, therefore, pushed on the market. The plants may be worth the cost in their beauty of flowers and foliage the first season, but when they become half dead after a severe winter and remain a blot on the lawn, they discourage further planting. People often plant one or three Rhododendrons on the bare lawn where the sun shines on the soil at their roots and dries them out in midsummer or the ground freezes deeply in the winter and the next spring they drop part of their leaves and lose some flower-buds. All this can be avoided by remembering that Rhododendrons need a leaf-mulch and that they love company. Places where Rhododendrons will thrive are so numerous that we enumerate first a few places to avoid: Under old trees of Silver Maple, Red Maple, and Willow, if on dry ground; on the top of a hill unless they have a temporary shelter from wind in the winter; in a soil of dry sand or gravel; stiff clay soil; limestone soil. They will grow anywhere on Long Island that corn and potatoes will, only add a leaf-mulch. They are appropriate at the foundations of a building, especially on a half-shaded side. Do not be afraid of the north side, thinking it is cold; that is just what they like, because the bright sun does not thaw them out quickly in the morning and dry out the leaves. A section of a long group of shrubs should be Rhododendrons.

In Long Island forests they will thrive excellently, and in the deepest shade they will have the longest and darkest foliage, but will there have the least number of flower buds. They especially like open groves of Chestnut, Oak and Dogwood. Swampy land can be transformed into beautiful gardens of Magnolia, Rhododendron and Azalea, but in such situations it is best to cut out a large bed in the turf roots of the swamp trees to lessen the competition against the Rhododendrons.

The formal garden of Mr. Paul D. Cravath, Locust Valley, L. I., is banked with a broad plantation of *Rhododendron maximum*, bordered by the bright red varieties of *Rhododendron catawbiense*. Back of

Rhododendrons, continued

this we moved on a Hicks Tree-Mover tall Cedars 25 to 35 feet high, to form a broad, dense grove. We now have large Pine, Hemlock, Cedar and White Spruce ready to ship for such frames. They are in better taste and cheaper than concrete and badly carved marble.

The Mountain Laurel is native over a large part of Long Island and there is no reason why groups of Rhododendrons should not be planted among them to add interest and extend the season of bloom.

Property owners on the Rockaway peninsula often say they cannot grow Rhododendrons. They will thrive there if given the soil and moisture conditions, which are obtained by deeper soil and a mulch of leaves. This leaf-mulch is a great bugaboo, people fearing that it will destroy the neatness of their lawn. The leaves may be kept from blowing about by mixing manure or soil with them or by a strip of wire netting 6 inches high, held by iron pins, or a border may be planted with Myrtle, Pachysandra, or other low-growing plants.

Rhododendron Catawbiense. This is the wild species native to the high and exposed mountain slopes of North Carolina and adjacent regions where the minimum temperature, sudden variation of temperature, bright winter sun and drying winds compare closely with this region. It is a compact, round bush of hardy foliage, thriving in full sun. Flowers bright lilac-red, red and reddish purple. Some may object to lilac and purple tints in the species and some of its hybrids. Keep them separate from the pinks and clear reds. Among the lilac and purple varieties are the hardiest and best in form and foliage and that should be at least half their value. This is the parent of the following Rhododendron hybrids. Don't be afraid to move around your Rhododendron and Azalea plants when in full bloom to group their colors harmoniously. Many of ours are planted as that time with perfect success.

RHODODENDRON CATAWBIENSE HYBRIDS

Atrosanguineum. As its name indicates, this is deep blood-red, and is a fine variety.

Album elegans. This is a tall, V-shaped bush, quickly becoming 5 feet high. It has large bunches of white flowers that are tinged with blush-pink



Flower of one of the *Rhododendron Catawbiense* varieties. The time will come when these varieties will be studied and compared with as much care as the Roses. There is really a great variety in the form of the individual flowers, the markings and shades of color, but few people are aware of it.

Rhododendron Catawbiense album elegans, continued

when first opening. It is the most popular white variety. It should be used at the background of shorter varieties. Many Long Island estates have long drives through the woods and open lawn that are used at dusk when returning from the train, or in the evening. These white and lilac-colored varieties, as Parsons' gloriae, President Lincoln and Delicatissimum, are more beautiful than than the pink and red varieties.

Abraham Lincoln. A fine rosy red, very similar in shade to Charles Bagley.

Album grandiflorum. Flowers large and showy, blush-white, closely resembling *Album elegans*.

Blandyanuum. Deep rosy crimson.

Boule de Neige. Pure white fluted edge. Plant low, compact and round.

James Bateman. Fine scarlet. Plant of good habit.

Caractacus. A variety noted for its brilliant crimson flowers. It is one of the most abundant red varieties and therefore can be used in large groups. The foliage sometimes burns in severe winters when in open situations.

Charles Dickens. Dark scarlet; fine foliage. Regarded by experts a very desirable variety.

Charles Bagley. Cherry-red.

Delicatissimum. Blush-white, tinted with pink. A compact bush of rich green foliage.

Everestianum. This is by some pronounced the hardiest of all. Its habit is low and broad-spreading and irregular, as if it were a form that grew up high on the mountains. Flowers rosy lilac, beautifully fringed and frilled at the edges.

Flushing. Rosy scarlet; a good variety.

General Grant. This has been much called for by those knowing the good varieties. It propagates slowly and has been difficult to get. Rosy scarlet.

Giganteum. Large bunch of dark pink flowers. Foliage gets browned in exposed places.

H. H. Hunnewell. Dark crimson.

Kettledrum. Deep red. Late. Plant open in growth.

Lady Armstrong. Pale rose-color. One of the best of the pink varieties. Free-blooming, with large flower-clusters.

Lady Claremont. A rosy scarlet, delicately spotted throat; fairly hardy.

Milner, Mrs. A rich crimson flower, and an excellent variety in every respect.

Minnie. Bluish white, with chocolate spots; not hardy.

Madame Carvalho. Bluish white, changing to white. Needs protection.

Old Port. Flowers a rich plum-color. One of the darkest varieties.

Rhododendron Catawbiense Hybrids, continued

Parsons' Gloriosum. A vigorous, rapid-growing variety which propagates readily and, therefore, is abundant, cheap and suitable for large masses, especially for woodland planting. Color bluish white, tinted with lilac, giving a white effect in the distance.

Parsons' Grandiflorum. This is a very excellent variety of good form, free-blooming and dark red in color.

President Lincoln. A variety similar to Parsons' Gloriosum; vigorous, rapid, cheap and tall-growing, and furnishing a large quantity of foliage and bloom for the money. Rosy lilac or rose-purple.

Henry Probasco. Deep carmine.

Purpureum grandiflorum. Flowers purple; large. Plant tall-growing, rapid, and a free bloomer.

Purpureum elegans. Flowers purple. One of the best of that class which contains the hardiest Rhododendrons and can be depended upon for planting in open, exposed places.

Roseum elegans. In a large nursery of Rhododendrons, this appears to be the best in form and texture of foliage mass. It is a compact, hemispherical plant, and very hardy. It would be suitable to plant at regular intervals in a formal garden, as Boxwood or Yew. Color deep rose.

H. W. Sargent. This is named for Henry Winthrop Sargent, who established one of the earliest arboreta at his country seat, near Fishkill. It is an excellent variety, crimson in color, large truss of flowers and good habit.

J. R. Trumpy. Rosy crimson, late-blooming variety, named for the man who has done the most and, perhaps, the only propagating of Rhododendrons in this country. We have a large part of each variety from the Parsons Nursery, Flushing, when that closed last year. It includes many of the hardiest varieties which originated from hybrids and seedlings there and propagated nowhere else in this country.

The Boss; syn., Mrs. H. S. Hunnewell. Bright clear pink, large flower; large, vigorous bush.

Dr. Torrey. Rose-pink; early bloomer.

Those interested in studying Rhododendrons in flower, are invited here in June, when we can show forty other kinds, including such rare, beautiful, and hardy varieties as Hannibal, Alexander Dancer, E. S. Rand, Scipio, James MacIntosh, Charles S. Sargent, Mrs. C. S. Sargent, Henrietta Sargent and many others. This is one of the best places in this country to study Rhododendrons.

Rhododendron maximum. In the past dozen years, thousands of car-loads of this have been dug in the mountains about Delaware Water Gap and in the Catskills, and used in landscape planting, because it was available for immediate effects. It has generally succeeded, and the few disappointments are traceable to direct violation of the Rhododendron requirements. It is native to lower ground than the Catawbiense and prefers partial shade, even in the summer, while Catawbiense and its hybrids have good foliage all summer when in full sun. It is easily transplanted, and the low price for large bulk, and the fact that tall plants are available, has lead to its extensive planting. We can supply in car-load lots direct from the collecting fields, or we have a number



Group of Yucca, or Spanish Bayonet, or Adam's Needle, on a sandy hillside on the estate of the late Hon. Wm. C. Whitney, planted from our Nursery.

Rhododendron maximum, continued

of plants growing in a shady part of our orchard for sale in small quantities.

The flowers extend the Rhododendron season from the time the Catawbiense Hybrids stop the last of June to the middle of July, therefore, they can be planted with others without fear of clash of colors. The colors range from pure white, slightly tinged with pink, to a deep pink. Winter-killing need not be feared, for this species is native in Nova Scotia and northern New York.

R. punctatum. This is the third species native to this country. It is a small plant, with small leaves. It blooms about two weeks before the Catawbiense varieties.

Yucca

Yucca filamentosa. The Yucca plant is usually associated with the deserts of New Mexico, but this species is native to the Atlantic states, and is entirely hardy here. It keeps as vivid a green as any evergreen and, therefore, should be used for its winter decorative value. Unlike many other broad-leaved evergreens, it delights in dry, hot situations, and will stand full exposure in the winter. It has the largest flower-spike of any plant of its class, some frequently reaching 4 feet and, occasionally, 6 feet in height. It is suitable for mass planting at the front of shrubs or it can be planted on a sterile hillside with Pines, Birch and Sumach. There is sometimes a sandy bank to a road, the grass turning brown in mid-summer and becoming unsightly. A cover planting of Yucca, Dwarf Pines, Thunberg's Barberry, *Rosa rugosa*, etc., is cheaper than grass in the long run because it requires no mowing. In a flower-garden it is a stately plant that may be used at regularly recurring intervals for its winter beauty and for its stately spire of cream-white, lily-like flowers.

Vines

We are too apt to think of Vines as primarily useful for shading porches. Mosquitoes often veto this use, for they like to linger where the foliage checks the rapid movement of the breeze. Awnings are more expensive, but more controllable porch screens. Vines which harbor mosquitoes are those which have been neglected and grow in a dense mass.

Porch vines should be pruned every year like the Grape, by cutting out all but a few branches. This will result in a thin layer of foliage which intercepts the view but allows the breeze to pass.

Vines are used much less than they might be, simply because people have not seen them or have forgotten or do not use their imagination. Many a landscape or building which is commonplace and ugly, may be transformed by the embellishment of a few vines. They decorate without occupying valuable space and without serious danger of over-growing their position because they can be readily pruned and not injure their beauty or flowering.

There is a beautiful driveway on the Pratt estate at Glen Cove, lined by stately Locusts. Without detracting from their dignity, each trunk is decorated by climbing roses or other vines. The Locust is especially favorable to this partnership for it does not utilize all the light and fertility. Locusts are a frequent part of the landscape on the northern half of Long Island and many object to them because of their narrow growth and sparse foliage, but they can be made beautiful all the year with *Euonymus radicans* for winter, Wistaria for early spring, Climbing Roses for June; Clematis, Honeysuckle and Trumpet Creeper for midsummer; Virginia Creeper, Bittersweet and Japanese Ivy for autumn. Steep banks may be covered and held by vines more effectively and cheaply than by grass. Groups of shrubs may often be edged with vines, or vines allowed to clamber upon them, softening their lines and making the whole a more luxuriant and harmonious group. The laundry paddock and tennis court may be screened by vines on a wire trellis.

Actinidia

Actinidia is a rare Japanese vine, as vigorous and healthy as the Wistaria. It has large white flowers like orange blossoms and bears fruit that is edible. We recommend it as a porch vine, for pergolas, fences or climbing up trees.



The showy red flowers of the *Trumpet Creeper* will add interest to a period in midsummer when flowers are scarce outside the garden.

Akebia

Akebia quinata. A vigorous vine with dark green foliage which is retained till midwinter. It will grow to a great height. The fruit is lead-colored, and opens showing a roll of translucent, sweet, edible jelly. The fragrant purple flowers are small and of rubber-like texture.

Bittersweet • *Celastrus articulata*

A vine which decorates fences, rocks and trees throughout autumn and all the winter with brilliant orange berries. We offer it at low rates, so that it can be planted in quantity and naturalized along banks, woodland borders and where it can climb up trees. It will do especially well on Locust trees.

Clematis

Clematis paniculata. This and the Japanese Ivy have come more rapidly into favor than any other vines. It is a snow-drift of white stars in August. It grows very rapidly and will quickly cover porches, pergolas and wire fences around tennis courts. If this variety is planted among shrubbery and small trees, it will embower them with flowers.

C. Virginiana. A species native to our swamps and roadsides, corresponding to the *Clematis paniculata*. It blooms a little earlier and does not grow quite so large.

C. Jackmani. This has large, purple flowers, about 6 inches in diameter, and is suitable for growing on the pillars in the flower-garden, but is not always large enough for a porch vine. For some reason (said to be nematode worms in the soil), it is difficult to grow, but well worthy of repeated trials by those who admire its chaste beauty. It is not as often seen on Long Island as in some other sections and possibly the soil or climate does not suit it. The two species above have no weak points,

C. Henryi. A pure white species like the above.

Dutchman's Pipe

(*Aristolochia siphon*)

This unique vine has immense heart-shaped leaves about 10 inches in diameter. It is suitable for porches, pergolas, or to clamber over stumps. It is slow the first two years, but ultimately will cover the side of a house. The flowers are inconspicuous, and so shaped as to justify its name.

Euonymus

Euonymus radicans. This vine is but little known, but when it is we predict for it a wide popularity. Of course, English Ivy has the advantage with its literary, ecclesiastic and art associations, but the Euonymus has the advantage of hardiness in our climate, especially from New York northward, and toward the interior. At Westbury there is a *Euonymus radicans* on a Locust tree where it is about 30 feet high, sending out long branches, 4 feet long, after the manner of the English Ivy and Poison Ivy. The leaves are permanently evergreen and are of dark color and glossy surface. It has no serious enemies and will grow freely on brick, stone, or even on painted boards. It will carpet the ground with green and grow upward in points about 2 feet. It can be rapidly multiplied as it takes root when layered.

E. radicans, var. Carriere. This form has larger elliptical leaves and is more shrub-like in growth.

E. radicans, Round-leaved Form. This is very distinct in appearance, with thick, round, light green leaves and abundant red berries. It will clamber over rocks and low walls and can be used at the foundation of a house or edge of groups of broad-leaved evergreens.



The graceful sprays and tendrils of our native *Woodbine*, or *Virginia Creeper*, are but little appreciated. It can be used to decorate tree trunks, pergolas, tennis back-stops, festoon shrubs or hold sand-dunes. (See page 76.)

Honeysuckle • Lonicera

Honeysuckles are a large genus, containing some valuable shrubs, described on page 58, and a number of useful vines. They are not particular as to soil or moisture and can be satisfactorily used for naturalizing along the borders of woodland, on fences, as well as on porches, windmill towers and pergolas.

Japanese. *Lonicera Japonica*. This is the most popular and widely known Honeysuckle. To show its appreciation of our climate it has run wild along roadsides and in the woods where its evergreen foliage brightens the winter landscape. It will make a hedge equal to the Privet, needing, of course, a wire fence to support it. It blooms abundantly in June, with deliciously fragrant blossoms, and then again in late autumn. It is called Hall's Honeysuckle from the missionary who first introduced it with the Hall's Magnolia and several other Japanese plants. He realized the climate similarity, but had difficulty to find a nurseryman to even pay the freight on his shipment. We can supply rooted layers at very low rates for planting on steep banks to hold them from washing.

Chinese. *L. Japonica*, var. *Chinensis*. Similar to the Japanese excepting that the leaves are purple beneath and that it does not readily take root from layers and spread in large mats where planted, and it does not spread from seeds. It is a handsome evergreen vine, with ornamental, shining black berries. We have propagated a

Honeysuckle, Chinese, continued

large quantity which we offer at low rates, presenting an opportunity to make a good landscape effect.

Coral Trumpet. *L. sempervirens*. Conspicuous for its long, red trumpet-shaped flowers. It is a handsome vine, occasionally wild on Long Island, in the Cedars or along fences. It can be appropriately planted in such situations, or on pergolas.

Heckrottii. This is a low climber, blooming in June, and again in October, November and December. It may be planted under or with other vines merely for its unusual flowering period.

Ivy

English. *Hedera helix*. There are many beautiful old plants of English Ivy on Long Island. Many will remember how the severe winter of 1903-04 killed back their favorite Ivy. Notwithstanding such occasional disasters, it is worthy of extensive planting. Like other broad-leaved evergreens, it likes best partial shade in the winter, partial shelter from severe drying winds and mulching to keep out the frost. These conditions can be met on the north side of the house or in groves of trees. The problem of making more attractive our rather monotonous winter woodland may be solved in part by using the English Ivy, both as a carpet on the ground and to run up the tree

Ivy, English, continued

trunks. It can be used as a border to garden paths, being trained along the ground. In such situations it is hardy. It prefers a humid and equable climate near the sea, and will grow best where not subject to severe summer drought.

Japanese, or Boston. *Ampelopsis tricuspidata*; syn., *A. Veitchii*. This clings closely to any structure and grows rapidly and to a great height. The autumn colors are brilliant shades of crimson, dark red and yellow. It will grow freely on tree trunks and is suitable to clothe unsightly clothes poles. Sometimes an objection is made to it that it covers up the ornamental features of brick and stone buildings. This ought not to be charged against the plant. Its vigorous growth can be easily cut back from windows and portions that it is not desirable to cover.

Kudsu Vine

(*Dolichos Japonicus*; syn., *Pueraria Thunbergiana*)

We are frequently asked for the quickest-growing vine for immediate effect. We have seen this make 5 feet in a week, but the leaves are not especially ornamental, being of rather coarse texture and resembling its relative, the lima bean. The long, starchy roots are used as food by the Japanese. The vine dies back each winter to the larger stems.

ROSES, CLIMBING. See under **Roses**



Flowers of this Wistaria are the most dense in the bunch and, therefore, the most showy. The rare *Wistaria multiflora* which we offer has flower-stems 3 feet long with the flowers wide apart and of deeper blue.

Trumpet Creeper · Tecoma

We occasionally see big, red flowers from the top of a tall Locust, and find that they come from this plant which sends up its large stem, as in the tropics. It is native from Virginia southward, where it makes a bad weed in the fields. It has left that habit behind and, therefore, may be extensively used on fences, pergolas, and to decorate woodland borders.

Virginia Creeper

(*Ampelopsis Quinquefolia*)

On Long Island there are sometimes open forests, especially of Locust trees along the north shore, which look as if their trunks were ablaze. This is the Virginia Creeper, which, with the Sumachs, is first to turn in the autumn. Many people are afraid of this vine because of its resemblance to poison vine, which has three leaflets, while the Virginia Creeper has five.

Virginia Creeper grows rapidly and makes an excellent shade for porches because it is open in growth and permits the breeze to blow through, especially if annually pruned. Mosquitoes are not so liable to remain as where a thick mass of foliage checks the breeze. It is found growing over the sand-dunes, holding them from blowing and washing, for it will thrive even where occasionally washed over by high tides.

Wistaria

This genus is a native of China and eastern United States. They are all rapid-growing vines, with clusters of pea-shaped blossoms. They are always healthy and, like other members of the Pea family, are able to get nitrogen from the air and, therefore, grow on poor soil.

Chinese. *Kraunkia*; syn., *Wistaria Chinensis*.

Just before the leaves appear in May, this will cover the side of a house with porcelain-blue flowers. A unique ornament for the formal garden or lawn is a tree-formed Wistaria. It takes several years to train it to a straight stem. We have a number of plants so trained, with heads at 5 to 7 feet. When trained this way, the plant cannot spend its energies in making long, rope-like branches, and it produces flowers very abundantly, sometimes having a second crop after midsummer.

White. *W. Chinensis*, var. *alba*. A pure white variety particularly appropriate for pergolas, and planting along woodland drives and on old tree trunks. A planting of this kind adds beauty and interest, and only costs the price of the plant, and the trouble of ordering and putting it in.

Wistaria multiflora. Japanese, or Loose-clustered Wistaria. Very few opportunities exist for purchasing this beautiful plant. You may recall a picture of a Japanese tea garden, with the bridge festooned with a blue fringe 3 feet long. This species grows vigorously here and no vine could attract more admiration when in bloom. It can be planted on pergolas and beside forest trees. The flower buds occasionally winter-kill.

It is the enthusiasm to search for the beautiful and good plants that characterizes this Nursery. They are propagated and grown without previous demand, even if it takes ten years, in the assurance that if the plant fits and its merits and deficiencies be told, it will be used. Therefore, this is a safe place to buy plants. It is not our policy to import and recommend unless plants are permanently good.



Rosa rugosa, Blanc Double de Coubert. Block of this and the *Belle Poitevine* in our nursery. Photographed in August, when most of the double Roses are unsightly semi-bare little bushes with foliage despoiled by insects and fungi. We believe that this stock offers an unparalleled opportunity to secure these varieties. They are on their own roots and purchasers may extend their plantations without expense by transplanting the suckers.



Baronesse Rothschild. A beautiful rose of delicate pink color

Hardy Roses

The short list of Roses we offer includes those varieties that are most popular because of their beauty and hardiness in this climate. If a greater variety is desired we will procure them. The hybrid perpetuals bloom abundantly in June and occasionally during the summer and fall.

Anne de Diesbach. Carmine. A large, beautiful and fragrant rose. Plant vigorous.

Baron de Bonstetten. Velvety maroon. One of the richest dark Roses.

Baroness Rothschild. Delicate pink. Large, full flowers, growing closely against the smooth, light green leaves. Very choice and beautiful. Not fragrant.

Francois Levet. Cherry-red. A valuable Rose from its strong growth and free-blooming habit.

General Jacqueminot. Brilliant crimson. This is perhaps the most popular Rose. A vigorous plant, with abundant large, fragrant blooms.

Hermosa. Bright rose-pink. One of the best bedding Roses that blooms constantly from June till October. A small, compact plant.

Jules Margottin. Carmine-rose. This grows to be a bush 5 to 6 feet high and wide, with luxuriant foliage and abundant blossoms.

Madame Gabriel Luizet. Silvery pink. A beautiful Rose. Slightly fragrant.

Madame Plantier. Pure white. Foliage and stem light green. This makes a large bush that is useful for hedges or for massing in shrubbery. The white blossoms are borne in large clusters.



Rose bugs are circumvented by the *Rosa rugosa*, Blanc Double de Coubert, and other varieties which bloom before and after their season. This variety has large milk-white flowers and foliage as perfect as Privet

Hardy Roses, continued

Magna Charta. Pink, suffused with carmine. The flowers are large and fragrant, borne on strong, light green stems.

Margaret Dickson. White. This Rose resembles Baroness Rothschild in its form and the close setting of leaves about the flowers. The large white blossoms with pale flesh center are very beautiful. Fragrant.

Paul Neyron. Rose-pink. The largest of the Roses. The stems are strong and smooth, and the foliage is a bright, light green. A free bloomer.

Princess Adelaide. Moss Rose. Delicate rose-color. The buds are well covered with moss, and the foliage is dark.

Persian Yellow. A thorny bush with delicate foliage, bearing a profusion of small bright yellow Roses clustered thickly along the branches. A favorite in old-time gardens. Very hardy.

Frau Karl Druschki. The ideal pure white Rose. Very large perfect flowers. A strong grower and very free-flowering.

Rosa Rugosa • Japanese Rose

Roses are usually thought of as of value for their flowers only, their foliage being of doubtful hardiness, and, if unsightly in midsummer, the plants are excusable and repay us by their beautiful flowers. The *Rosa rugosa*, *R. Wichuraiana* and *R. multiflora*, all from eastern Asia, bid fair to change all this. They are perfectly healthy in foliage and are handsome all through the summer and need no protection to prevent killing back in the winter.

Rapid strides are being made by plant breeders in this country and Europe in introducing new varieties with improvements in colors, size and doubling of the flowers. Only a beginning has been made during the last fifteen years in this direction. With proper encouragement by amateurs, much more rapid improvement is possible.

The form of the *Rosa rugosa* bush is broad and rounded, 4 to 6 feet high and equally broad. It is

Rosa rugosa, continued

solid and dense from the ground up. The foliage is dark green, shiny, and the leaves are rugose or ridged between the veins.

The rose-bugs are more frequently asked about than any other insect pest. Hand-picking is the most practical remedy, but as it breeds in damp, sandy ground, and Long Island has an abundance of such ground, the rose-bugs some years are a vexatious pest. The *Rosa rugosa* and its varieties offer a positive way to circumvent the enemy. They bloom May 15 and the rose-bugs come about June 1 or a little later, and remain one month.

The *Rosa rugosa* and its varieties, the Prairie Rose and *Rosa Wichuraiana*, bloom in July after the rose-bugs have disappeared. The Rugosa also blooms during August and September. A good way to increase the amount of this midsummer blooming is to cut back the plants nearly to the ground or one-half way in the winter, or some can be cut back in June. This cutting back is beneficial, at least once in two or three years, to make the plants more compact. The red fruits are like little apples, about 1 inch in diameter, and are very showy being in large clusters. The thin pulp is edible.

For seaside planting, the Rugosa is one of the very best plants and offers an answer to the frequent question, "What can we plant besides Privet?" On road banks, in wild gardens, as hedges and borders, around flower-gardens and in almost any group of shrubs, the *Rosa rugosa* and its varieties are highly satisfactory.

Rosa rugosa rubra. Single red flowers about 4 inches across.

R. rugosa alba. Single, pure white flowers.

Blanc Double de Coubert. We think so highly of this variety that we have propagated it by the slow process of layering plants. These plants are now four years old and are well branched and bushy. It takes a few years for a good thing to become known by the horticultural public, and Roses of the Rugosa class have not been actively pushed because they are slower to propagate or

Rosa rugosa, Blanc Double de Coubert, continued

cannot be as cheaply imported as the ordinary Hybrid Perpetual and Tea Roses. The flowers are 6 inches in diameter when they appear in early May, and those in midsummer are only slightly smaller. They are beautiful as cut-flowers and, when to this beauty is added their earliness, and the fact that there are no rose-bugs crawling down them over the table, we have sufficient arguments for their extensive planting.

Belle Poitevine. Both this and the last have the pure Rugosa foliage that is perfectly healthy. The flowers are double, red, of the same shade as the species. We have propagated them by layers and the plants are large and bushy, suitable for immediate effects. They can be used for planting on sand-dunes, overhanging a sea wall, as garden hedges, or in the shrubbery. It is rare that such good value is offered in Roses or shrubs, and our large stock is due to an enthusiasm to popularize a little-known class of Roses and to encourage plant-breeding in varieties that are well adapted to the climate.

Madame Georges Bruant. This is a hybrid Rugosa and the foliage shows its other parentage by becoming mildewed.

Memorial Rose • *Rosa Wichuraiana*

TRAILING ROSE FROM JAPAN

The answer to "What's in a name?" is shown by this Rose. It was on the market under its long, unwieldy Latin name, and, except for a few Boston enthusiasts, found no market. Then Henderson christened it Memorial Rose and advertised it widely in the magazines with a picture of it as a grave covering. This Barnum-like advertising got people to know it and its use as a grave cover is well-nigh forgotten. It runs over the ground, making a solid mat about 8 inches deep, of shiny dark green leaves. It will often grow 15 feet in a year and only needs to be started up by tying to make an excellent climbing Rose.

People of this section have a slight realization of the landscape use of cover plants. This species has all the elements required, even that of propagating without expense on a private estate when once established; that is, a few plants can be set, and as they take root wherever they touch the ground, they can be divided up and the area extended. They also grow readily from cuttings.

On Long Island Sound there are many bare bluffs of running sand which may be wasting away at the rate of 1 foot per year. A sea wall will hold the base. This Rose, with Pitch Pine, Cedar, Bayberry, Honeysuckle, and a number of other plants, will efficiently hold the sliding soil and prevent the top from falling down to a less steep angle. Another use is to carpet the ground under tall shrubs, such as Lilacs.

Greater improvement by hybridization has been made with this species than with any other in this country. One of the first improvements was made by that most eminent horticulturist, Jackson Dawson, of the Arnold Arboretum, who produced the Dawson, Farquhar, and several others yet to be introduced. Other hybrids were made by the Newport Nursery Co., and by Mr. Walsh, Woods Hole, Mass., and others. It hybridizes freely with the Tea Roses. The beauty of the creamy white flowers is enhanced by the cluster of golden stamens.

This species and its varieties bloom after the rose-bugs have commenced to disappear, about the

Memorial Rose, continued

first of July. They greatly extend the season of Roses, for the Hybrid Perpetual Roses are at their height in June. This species continues to bloom throughout the summer and we have seen it a beautiful carpet of white just beyond the surf at Nahant, in August.

A recent book on "Roses, and How to Grow Them," published by Doubleday, Page & Co., says that the Wichuraiana Hybrids are a new group of immense importance to American gardens, yielding the best climbing Roses for porch or trellis.

Rosa Wichuraiana. Single, cream-white flowers.

Lady Gay. This has large clusters of pink flowers of the color of the Hermosa Rose. We know of no climbing Roses that have sprung into such popular favor as this and the Dorothy Perkins, since the advent of the now ubiquitous Crimson Rambler. People are getting tired of the latter, and the above new varieties are so much more delicate in color that no one can criticize them. Their foliage is free from the mildew which attacks the Crimson Rambler.

Jersey Beauty. Large, single, pale yellow flowers.

Gardenia. This is a surprise to those who remember the climbing Tea Roses, with the big yellow blossoms, which hung from the rafters of old-time greenhouses, and who never expected to see such Roses out-of-doors. It is not quite hardy and needs to be laid down and protected, unless on a south sloping terrace bank where the wood ripens up early.

Pink Roamer. Bright pink, single flowers.

Universal Favorite. Rose-colored, double flowers, about 2 inches in diameter.

Dorothy Perkins. The most beautiful of the hardy climbing Roses. A Dorothy Perkins will quickly cover a gateway or pergola with rich glossy



Memorial Rose, or Rosa Wichuraiana. A beautiful trailing species with tea-scented cream-white flowers. It is one of the healthiest foliated Roses and highly useful as a climbing Rose, as a cover plant for steep banks and for seaside planting. Its ability to hold steep sand banks and cover walls is exhibited along the public road on the property of Mr. Robert W. de Forest, Cold Spring Harbor, L. I.

Rose, Dorothy Perkins, continued

foliage which, in July, becomes a bower of lovely pink blossoms. The branches often arch to the ground under the weight of the many heavy clusters of bloom.

Crimson Rambler. This rampant grower has illuminated more homesteads than probably any other flower. It has been introduced only about 15 years and yet has sold by the million. Its characteristics are vigorous growth, sometimes reaching 15 feet in a year, perfect hardiness, profusion of bloom in large clusters about the last of June.

Prairie Rose. *Rosa setigera*. This is native in the northern states and out through Michigan. It is about the only species of American Rose that has been improved. Its foliage is healthy and is of light green color. It grows rapidly and it will festoon the tops of trees over 20 feet high. It is excellent as a shrub where it will make long, arching branches, 10 feet high. The problem of decorating hedge-rows, woodland borders, swamps is quickly solved with this, *Rosa multiflora*, *R. Wichuraiana*, *R. Nitida*, and other wild Roses.

We have tall plants of this that have been trained to stakes and are suitable for immediate results on pergolas.

Baltimore Belle. A variety of the above, with clusters of large double white Roses.

Queen of the Prairies. Another variety with large, bright rose-colored blossoms. Before the advent of the Crimson Rambler these two varieties were the mainstay for climbing Roses, and as they have no defects, we see no reason why they should not continue in favor.

Wild Roses

There are several species wild on the sandy hills, roadsides, and swamps that have a high landscape value and which should be used freely in landscape planting, especially for covering large areas. They are easy to collect; simply dig them up and cut off the tops and the first year they will spring up almost as vigorously as blackberries, to which they are related. They will make a solid mass of foliage and cover the ground completely, excluding weeds after they are established.

The flowers of our wild Roses are mostly a delicate pink. They appear in June and are followed by bright red hips which remain during winter. The foliage of these Roses is good, the bark of the twigs is tinged with red and therefore their winter effect is useful in the landscape because the twigs are so numerous as to give a distinct haze of color.

Rosa Nitida. An abundant species about 3 feet high, with reddish stems so thickly covered with prickles as to appear moss-like.

R. lucida alba. This wild Rose is a white variety which has been extensively used in landscape planting. As its name indicates, the foliage is shiny.

Sweet Briar. *Rosarubiginosa*. Eglantine. The Sweet Briar Rose has a delightful perfume, especially on a dewy evening, and should be planted in the garden and near the house for that alone. It has become naturalized in the Cedar fields and roadsides of Long Island. There have been produced a number of new varieties known as Lord Penzance Hybrids.



An excellent treatment for a curved path on a small lot where there is no room for a flower-garden. The planting contains Peonies, Canterbury Bells, Iris, Sweet William and, in the shade next the house, tall Rhododendrons



Showing how many beautiful flowers can be grown on a small area between a vegetable-garden or boundary which needs to be screened and a drive or path. The background consists of tall shrubs interspersed and bordered by Hollyhocks, Eulalia Grass, Day Lily and other hardy flowers. To fill out the space the annual, Nicotiana, is used.

Hardy Garden Flowers

The flower-garden is now considered as an outdoor room and as much under the care of the head of the household as any part of the house. The pleasures of a flower-garden cannot be fully described, but it is our purpose here to describe a collection of the good things that may be readily cultivated and give delight throughout the season. All of the plants offered are hardy, and only a few of them require autumn mulching, which they get in a state of nature and which is a benefit to all the garden.

Care of a garden of hardy flowers is limited to keeping the weeds down and the paths in order, cutting the tops of those that have gone to seed, and replanting or dividing some varieties after a few years' growth, to reduce overcrowding or to give the surplus to a neighbor. There is no annual charge for replanting.

With the hardy flowers may be appropriately planted tender flowers from the greenhouse or bedding plants, such as Geraniums, Begonias; annual flowers from seed, such as Asters, Balsam, Morning-Glory, Marigold, Nasturtium, Pansy, Poppy, Portulaca, Sweet Peas; and bulbs, as Hyacinth, Tulip, and Crocus. There are also a number of shrubs that are appropriate in the flower garden: Azalea, Japanese Maple, Boxwood, Laurel, Rhododendrons, Roses and evergreens, as Red Cedar, Yew, Retinospora and Arborvitæ.

Another use, not often thought of for hardy garden flowers, is to plant them among groups of shrubs and trees, adding color and interest during the dull season of summer and early autumn. Flowers useful for this purpose are usually the tall-growing varieties that exhibit their flowers above the foliage of the shrubs, such as Aster, Asclepias, Cassia, Helenium, Helianthus, Hibiscus, Hollyhock, Iris, Lily, Misanthus, or Eulalia Grass, Golden Glow, Yucca, and many others.

Cover planting is a form of landscape gardening in its infancy. Planters have yet to realize its perennial economy and beauty, especially on areas difficult to keep in good grass. For such purpose, we offer in quantity at low rates, *Iris cristata*, *Phlox subulata*, *Sedum*, *Vinca*, *Yucca*, etc.

We have followed the system of botanical names in this department and have cross-indexed with the common names.

ACHILLEA. A low plant, growing about $1\frac{1}{2}$ feet high, with branching clusters of little white buttons like the Bridal Wreath, which can be picked almost any time in the summer to add to bouquets the same as Baby's Breath.

AGROSTEMMA. See *Lychnis*.

ALTHAEA rosea. Hollyhock. The single Hollyhocks are the most stately and have the strongest hold on the affections. They are not generally offered. Four years ago we gathered a large quantity of seed from an old garden and now we offer them in strong plants, at a low price and in quan-

Althaea rosea, continued

tity sufficient to plant in large groups, in borders, around the outside of flower-gardens, or against buildings. They are in various colors—mixed, carmine, maroon, pink, yellow, salmon, white and intermediate shades.

Double. Pink, Maroon, White, Yellow, Red.

ALYSSUM saxatile compactum. Golden Tuft. A mass of bright golden yellow very early in the spring, giving one of the sunniest touches to the garden. It grows less than 1 foot high, and is best used as a border or to hang over rocks, for it likes a dry situation.

AMSONIA tabernæmontana. This is a sturdy plant, growing about 2 feet high, with flat clusters of pale lavender-blue flowers in June. It may be properly used in the shrubbery.

ANEMONE Japonica alba. Japanese Wind-flower. To our minds the most chaste flower of late autumn, having the beauty of the Madonna Lily. Commencing in August it continues till severe frost. The flowers are borne on long, upright stems, about 2 feet high. It is one of the most beautiful flowers for house decoration. This plant is benefited by slight mulching for winter.

A. Japonica, var. "**Queen Charlotte.**" Semi-double flowers of the silvery pink shade of the La France Rose.

A. Japonica, var. "**Whirlwind.**" Large, semi-double pure white flowers.

A. Pennsylvanica. This is smaller than the Japanese Anemones and blooms from June to

Anemone Pennsylvanica, continued

midsummer. The large pure white flowers are about 1½ inches in diameter and are borne on a long stem.

ANTHEMIS tinctoria. Marguerite. One of the numerous family of compositæ, with yellow, daisy-like flowers blooming from June throughout the summer. It is about 15 inches high and has a dense mass of handsome foliage. It can be used on dry banks.

AQUILEGIA. Columbine. The Columbines are old-time garden favorites, without which no garden is well equipped. The colors range through blue, yellow, orange and white. They are most showy during the spring, and early summer but the scattering blooms continue throughout the season. Their chief charm is in the long, graceful spurs, tipped with a drop of honey.

A. chrysanthia. Golden Columbine. Flowers golden yellow, with long spurs.

A. cœrulea. Rocky Mountain Columbine. One of the most beautiful hardy plants; long-spurred, blue and white flowers.

A. glandulosa. Deep blue and pure white.

ARABIS alpina. Alpine Rock-Cress. Similar to the Alyssum, but with pure white flowers from early spring till summer.

ARMERIA plantaginea. Thrift. The sod-like habit of this plant makes it useful for borders, rockwork, or the foreground of taller plants. It is native to the seashore and, therefore, we recommend it to our numerous customers who are attempting to make gardens and lawns near the shore. The little tufts of foliage remain green all winter, making it doubly valuable for bordering flower beds. The flowers are little, rosy pink heads about 8 in. high.

ARTEMISIA Abrotanum. Southernwood; Old Man. A foliage plant of gray-green color and a bitter aromatic odor.

ASCLEPIAS tuberosa. Butterfly Weed. Occasionally growing in sandy soil of Long Island is seen a mass of glowing orange flowers in the hottest period of mid-summer. This is so pure and brilliant a color that it seems strange that it does not become popular in landscape planting, for it is as well fitted to planting in front of shrubbery and Pine groves as to the flower-garden. Perhaps one reason is that its deep-penetrating drought-resisting roots do not make it as easy to handle in the nursery as surface-rooting flowers. Some one can create a brilliant effect on sterile soil or near the sea without any expenditure for improving the soil. It grows about 2 feet high.

ASTILBE Japonica. *Spiraea Japonica*. A feathery white blossom about 2 feet high, useful as a cut-flower except that the rose-bugs are very fond of it. It is frequently forced for Easter.



The Single Hollyhock, like the old-fashioned Lilac, has stronger hold on the affections than the Double. Long rows can border the garden

ASTER. The hardy Asters, native to roadsides and abandoned fields, vie with the Goldenrods in illuminating our autumn landscape. Their abundance and beauty in a wild state have prevented the extensive garden use of them as in England where many named varieties are grown. They can be planted in the larger beds of a flower-garden, among the shrubbery, and in wild gardens.

A. Novæ-Angliae. The New England Aster is most abundant on the north side of Long Island, as about Port Washington and Glenhead. It grows about $2\frac{1}{2}$ feet high. The large deep blue flowers appear in September.

A. Tataricus. A species we imported from Asia, which we consider one of the best late-blooming flowers. After the frost has killed most garden flowers in October, great sheaves of this and *Helianthus Maximiana* can be cut and put in umbrella stands for house decoration. The flowers are a clear azure-blue.

BAPTISIA australis. Blue Wild Indigo. A plant useful for its rounded mass of foliage about 3 feet high. It has spikes of blue, Lupin-like flowers in mid-summer. With its deep root system, leathery leaves and ability to gather nitrogen from the air, it should be useful in dry, sterile soils.

BEE BALM. See Monarda.

BELLIS perennis. English Daisy. This is as much the children's favorite as the first Violets and Forget-me-nots. The cheerful pink and white blossoms appear in April and continue throughout the season, especially in cool autumn weather. They should be used as edging along garden walks and in the children's garden.

The Bride. A magnificent, free-flowering, pure white variety, with flowers on long stems, making it of value for cutting.

Longfellow. Large, double, pink flowers.

BETONICA. See Stachys.

BLANKET FLOWER. See Gaillardia.

BLEEDING HEART. See Dicentra.

BUTTERCUP. See Ranunculus.

CACTUS, opuntia vulgaris. The prickly pear grows in the bottom of the driest valleys at Meadow Brook on the Hempstead Plains where the soil is a coarse gravel. It also grows on the beach at Eaton's Neck. A novel use of it was made in the garden of Mr. Stanley Mortimer, at Roslyn, L. I. A terrace bank was held nearly vertical by wire netting, and this Cactus covers it with golden blossoms about 3 in. in diam., followed by the red pear-like, edible fruits.

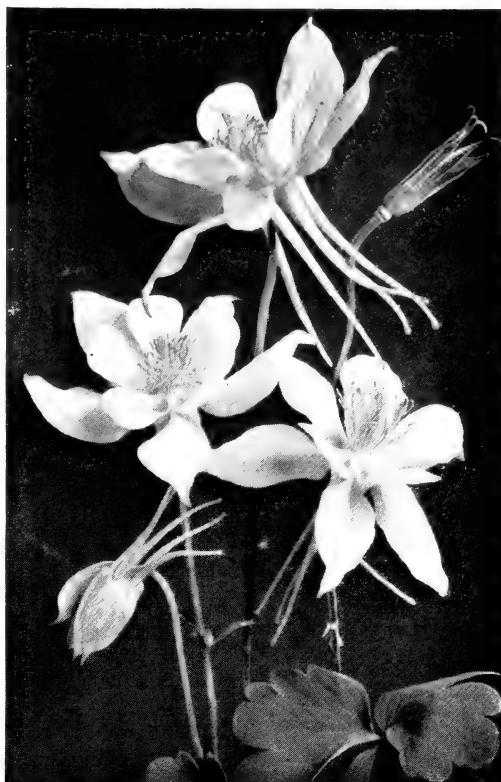
CAMPANULA. Canterbury Bell. This is a class of stately garden plants with beautiful spikes of blue or white bells; suitable for cut-flowers. The Platycodon was formerly named Campanula and belongs with these in the flower-garden.

C. persicifolia grandiflora. Undoubtedly one of the handsomest of the Bellflowers. It grows 2 to 3 feet high, with large, blue or white flowers.

C. persicifolia gigantea Moerheimi. A new variety, with large, white flowers 2 inches in diameter, blooming during the summer.

C. carpatica. A low plant, suitable for edgings, with beautiful blue bells like the Blue Bells of Scotland, blooming throughout the summer.

CENTAUREA macrocephala. A sturdy plant, $1\frac{1}{2}$ feet high, of neat habit, with large, golden yellow, thistle-like flowers, useful for cutting and decorative in the flower-garden or shrubbery border.



Aquilegia caerulea, the long-spurred Rocky Mountain Columbine, possesses graceful dignity and exquisite coloring

CERASTIUM tomentosum. This is called "Snow in Summer," for it makes a low mat of silvery white foliage, covered with numerous white flowers. It may be used as a border or on banks in the same manner as Moss Pink.

CHRYSANTHEMUM. The Chrysanthemums are the most available plants for decorating the garden after frost. We have tested many of the Pompon varieties, and have selected this list as giving the best series of color in the hardy sorts. They are, of course, not as large as the greenhouse varieties, but they are always favorites with garden lovers. They will live in any situation, but the best flowers will be produced if in a slightly sheltered position at the time of blooming, as on the south side of a building or hedge. It is noticeable that the best Chrysanthemums appear along the shores of Long Island where the water keeps off the early autumn frosts.

Eagle d'Or. A beautiful golden yellow that is a favorite with every one. One of the most showy flower effects in Newport is a long row of yellow Chrysanthemums in front of a dark hedge.

Princess of Wales. The best white variety.

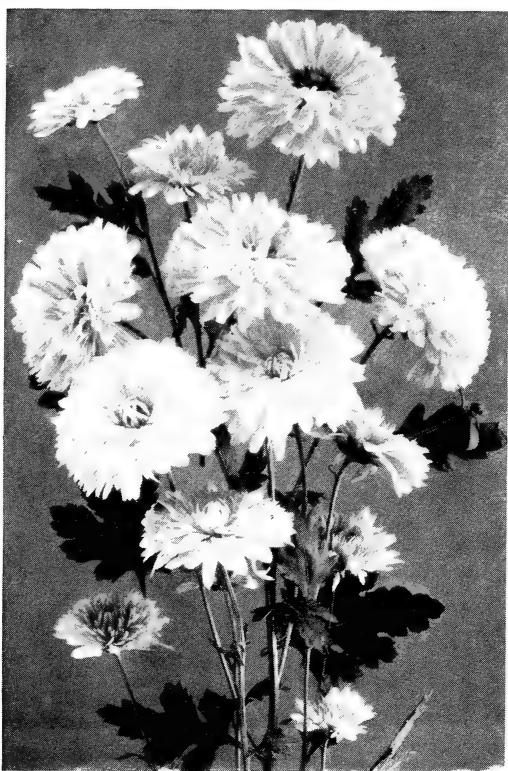
Anna Mary. Cream-white flowers.

Princess Louise. A fine bronze-colored variety.

Julia Lagravere. A very fine rich garnet.

Rhoda. Delicate apple-blossom pink.

St. Illoria. Silver-pink.



Hardy Pompon Chrysanthemums. We have selected a good variety to represent each color

Chrysanthemum, Small Golden Button. The latest and hardiest variety, continuing during December. The distinct, solid foliage, which holds exceptionally late, makes it particularly valuable for edging beds of shrubs.

C. maximum, "Triumph." A plant about $2\frac{1}{2}$ feet high, with white, daisy-like flowers from June until October.

C., Shasta Daisy. One of Luther Burbank's productions which, in this climate, has not come up to its description. It has large, pure white flowers nearly 4 inches in diameter.

CLEMATIS Davidiana. A shrub-like plant about 4 feet high, bearing fragrant blue flowers resembling Hyacinths. August and September.

C. recta. Upright Virgin's Bower. This grows 2 to 3 feet high, has dense panicles of small white flowers, like the *Clematis paniculata*. We recommend it for the rear of flower borders, for planting among shrubs and for cut-flowers.

CONVALLARIA. Lily-of-the-Valley. A horticultural fact that is well known is that Lily-of-the-Valley will grow in the shade. It can be used as a carpet under evergreen trees and shrubs, and in the shady corners next to buildings. We grow it in large quantities and the plants can be divided and replanted as they crowd, and so cover a large area.

COREOPSIS. A favorite among the numerous yellow, daisy-like flowers. It blooms so profusely and continuously that a bowl full of long-stemmed graceful flowers can be cut at any time from June until the end of summer. It has not the clumsy sunflower-like or weedy appearance of some of this family.

COWSLIP. See Primula.

DAFFODILS. See Narcissus.

DAISY. See Bellis and Rudbeckia.

DAY LILY. See Funkia and Hemerocallis.

DELPHINIUM. Larkspur. These tall, blue spikes are among the most beautiful and useful hardy flowers.

D. formosum. Indigo-blue. The old-fashioned sort. Has a continuous succession of flower-spikes. 4 feet.

D. grandiflorum, var. Chinese. A low-growing variety, with fern-like foliage and deep blue flowers from June to August.

D., Kelway's Hybrids. A very fine range of colors, in tall, vigorous spikes. 5 to 7 feet.

DESMODIUM. See Lespedeza.

DIANTHUS. Pink. We have a large collection of the various Pinks. They represent in the garden the Carnation of the greenhouse. They like a dry, sunny position in the garden where their sod-like foliage makes an excellent border for paths.

D., June Pink. Double, white. This is the old-fashioned sort, with clove-scented flowers of pure white color. Large mats of it should be in the flower-garden or on sandy banks.

D., Homer. Rich rosy red, with dark center.

D. delicata. A soft delicate rose, finely fringed.

D. plumarius. Double and single hardy garden Pinks in a variety of colors.

D. Chinensis. China Pinks. This and the following varieties are raised from seeds and bloom the same year and the next, being usually classed as annuals or biennials. We take especial care to grow only the finest, richest sorts, such as **Fireball**, which has double globular blood-red flowers, and Crimson Belle, the large single rich crimson flowers, as these are very rich for bedding purposes.



Dianthus Chinensis and D. Hedewigii. The Chinese and Japanese Pinks are similar in habit and in colors—rich crimson-maroon, brilliant reds, clear pinks and white,

Dianthus Hedgewigii nobilis. Single Japan Pink. The colors of this variety are in very rich shades from white to dark red, the petals are twisted and undulated. They give a brilliant show for a long season from early spring to autumn and are excellent for cut-flowers.

D. barbatus. Sweet William. The Sweet Williams give as brilliant a mass of color as any plant in their season. We grow them in large quantities and offer them at low rates so they can be used to give a brilliant show in new gardens. We offer them in separate pure shades of the deepest crimson, and in pure white, for mass planting, as well as in varying shades from white through pink to deep, dark red. They grow about 15 inches high with long stems for cutting and bloom in a solid mass in June with scattering blossoms throughout the summer.

Pure White. Specially selected stock for mass planting.

Rich Deep Crimson. A bed of this color makes a most gorgeous display during the blooming period.

DICENTRA spectabilis. Bleeding Heart. The Bleeding Heart had as prominent a place in our grandmother's garden as the Peony and the Rose. The graceful, arching stems push up rapidly and bloom while early spring garden work is in progress. The plant dies down in June and the space can be occupied with annuals like Verbena, or carpeted with Moss Pink. The flowers are the delight of children for making bunny rabbits, slippers, and other playthings.

D. eximia. This is a comparatively new plant that we recommend highly. The foliage is



Sweet William bordering grass path. It blooms for a long period and should be used in new and bare places

Dicentra eximia, continued

as useful all summer as Maidenhair Fern for making up bouquets. The clusters of pink flowers are so abundant in May as to make a solid mass of color for a large group or border, and they continue throughout the summer. It is a dainty plant for the wild garden or the Rhododendron bed, yet it will thrive in the open.

DICTAMNUS fraxinella. Gas Plant. This sturdy plant has a spike of white or pink flowers in June and July. It gives off a pungent, fragrant, volatile oil which will burn.

DIGITALIS purpurea. Foxglove. The dignified and stately Foxgloves are indispensable in a flower-garden and are equally so in a shrubbery border and for house decorations, especially the pure white, which we grow in quantity. In June the tall flower-spikes appear and they will continue later if the seed-stalks are cut down. The color ranges from white to rose and purple and the height varies from 2 to 5 feet. The stems are strong and require no stakes to hold them up.

D., Pure White. Selected varieties from our stock which make a beautiful display.

DORONICUM platagineum excelsum. While yellow daisies may be a drug on the market in August, this one is welcome in April. It shoots up rapidly and bears a graceful lemon-yellow flower about 3 inches in diameter, with long, taper-pointed petals. It is not weedy in its habits.

EUPATORIUM coelestinum. Hardy Ageratum. This is an even sheet of light blue in August and September, and is useful as a border or in wild gardening.

FUNKIA. Day Lily. Plantain Lily. The Day Lily family are all plants of neat habit, making a symmetrical crown of foliage that is so uniform in shape as to be useful for formal gardening. The plant keeps so accurately its own position that it may be used as a border for the taller shrubs and flowers, and the variegated variety is occasionally used for that purpose.



Foxglove planted in a vista looking into dark woods. There are many similar places on Long Island where it can be most appropriately used. It grows wild in such places in England and can be readily naturalized here.



Funkia ovata. This has a handsome mound of glossy leaves with the tall flowers shown in the illustration, through a long period of summer.

Funkia ovata. This has spikes of blue bells about 2 feet high.

F. lancifolia. Narrow green leaves and lavender flowers.

F. lancifolia, var. variegata. Flowers like the last, but foliage distinctly variegated with yellow and white.

F. subcordata grandiflora. This is as beautiful as the Madonna Lily, and much easier to grow. Stock of it is rather low among nurseries and we advise a good quantity of it to be put in gardens while there is an opportunity. The flowers are about 5 inches long, pure porcelain-white, graceful in outline and delicate in perfume like the *Lilium longiflorum*, or Easter Lily. It flowers in June and July. Useful plant for a shady corner next the house or on the lawn, wherever Rhododendrons thrive.

GAILLARDIA grandiflora. Blanket Flower Large, showy, daisy-like flowers, banded with orange and rich red. In bloom all summer and so useful for cut-flowers that no garden can afford to be without it.

GENTIANA Andrewsii. Closed Gentian. Celestial-blue flowers that are worthy the highest admiration. Native along brooks on Long Island. 1 foot high. September.

GYPSOPHILA paniculata. Baby's Breath. A fine white spray to give a halo of white around a bouquet of other flowers. It grows about 2 feet high and blooms in August and September.

G. repens. A low plant about 6 inches high, with pretty little pink flowers, and suitable for borders or dry places.

HABENARIA ciliaris. A fringed orchid that grows on the Hempstead Plains. It has showy spikes of orange flowers in July.

HELENIUM autumnale superbum. Sneeze-weed. A tall yellow composite, blooming late in the summer, decorative and neat.

HELIANTHUS Maximiliana. Maximiliana's Sunflower. The latest and showiest tall flower. After several hard frosts have killed off nearly everything but the Witch Hazel and Chrysanthemum, this will hold aloft its golden banner as high as a field of corn. With the name Sunflower, we think of a clumsy, weedy plant. It is a graceful flower of taper-pointed petals about 4 inches wide, as beautiful when cut with short stems as when its arching stems reach to the ceiling of an entrance hall furnished in dark shades. As it solves three problems: flowers for the garden, shrubbery, and the house at the end of the season, it should become widely planted.

H. mollis. Hoary Sunflower. A sturdy, upright plant about 4 feet high, with silvery white foliage. Flowers lemon-yellow in August and September.

HELIOPSIS levis, var. Pitcheriana. A composite like the last, growing about 3 feet high, with deep orange-yellow flowers about 3 inches in diameter. It blooms earlier than most of its class in June.

HEMEROCALLIS. Yellow Day Lily.

H. fulva. Tawny Day Lily. About abandoned houses and about roadsides where garden rubbish has been dumped years ago, is a tall, tawny yellow Lily, which we have seen successfully used to hold steep banks above sea walls. Its vigor and persistence shows a commendable quality. The following are improved forms of excellent garden value and with long stems as cut-flowers.

H. Florham. A new variety, originated from hybrids made by Mr. Herrington, gardener to Mr. H. McK. Twombly. They have very large, golden yellow, sweet-scented flowers during June and July.

H. Dumortieri. A Japanese variety with deep orange-yellow flowers, bronzed on the outside. It grows about 1½ feet high.

H. flava. Yellow Day Lily. Clusters of deep yellow flowers about 4 feet high.



White Day Lily, *Funkia subcordata grandiflora*, as it grows in the open garden. It is a chaste flower.



Hemerocallis, or *Yellow Day Lily*, on edge of pond. One way by which the mosquito problem may be solved on Long Island, where the small stagnant ponds occur on the hills. These ponds were formed by the melting of masses of ice in the terminal moraine, letting the surface drop down to form a basin. Mosquitoes breed along the shallow edges of such ponds unless the edges are kept steep and smooth by grading or wall, so the fish can eat the mosquito larvae. This is one of the methods recommended by the report of the North Shore Improvement Association on Plans for the Extermination of Mosquitoes on the North Shore of Long Island between Hempstead Harbor and Cold Spring Harbor, which may be obtained of the Secretary, Mr. Wilmot T. Cox, 34 Pine Street, New York. Walls of this kind or concrete maintain a definite edge and abolish the unsightly and gradually widening strip of mud and weeds as the ponds dry up in summer.

Hemerocallis flava, var. **flore pleno**. Double Orange Day Lily. Large double yellow flowers, shaded with copper. Of value in gardens and in shrub plantations or waterside gardens where there is room for a big, showy plant.

HIBISCUS Moscheutos. Marsh Mallow; Rose Mallow. Along the edges of the salt marshes this has the largest wild flowers of this region,—big, Hollyhock-like blossoms, 6 inches across, of cerise-pink, with a crimson or white center. It thrives perfectly in the garden or among shrubs and does not suffer from drought. It is a sturdy, bush-like plant, about 4 feet high. We offer, at low rates, plants for wild garden, seaside planting, or the other uses mentioned.

HEUCHERA sanguinea. Alum Root. A dainty little plant, with spikes of coral-red bells about the size of the Lily-of-the-Valley.

HOLLYHOCK. See *Ahhaea rosea*.

IRIS. Few lovers of flowers realize the beauty and variety and the extended season of bloom of this extensive family. Early in May, as the Daffodils are passing, the *Iris cristata* spreads a carpet of sky-blue stars; a week later the *Iris pumila*

Iris, continued

hybrids make a bold display. Then come the German Iris in May, followed by the Siberian in early June. The closing act is the most brilliant—the Japanese in early July. All are worthy of a place. All the Iris are hardy and have no bad habits. They thrive in gardens or on the borders of aquatic gardens.

S, standards or upright petals; F, falls or lower petals.

I. Germanica. German Iris, or Flag. Fleur-de-Lis. These sturdy plants grow about $2\frac{1}{2}$ feet high, and bear several flowers on a cluster which open a few days apart so that they last for a week as cut-flowers.

Black Prince. Early; large flower. Deep royal purple. 2 feet.

Florentina. Orris Root. Silvery white flowers a little earlier than the others of its class. It is so distinct from the blues that it should be added to gardens that do not have it.

Madame Chereau. Pearly white, with edges delicately feathered azure-blue. A charming variety.

Old Purple. The old-fashioned, early, deep purple.

Othello. S. Clear purple. F. Royal purple.

Spectabilis. Deep velvety blue. The earliest in May.

Walneri. S. Light blue. F. Light purple, veined. Under this name we offer the light blue variety and have grown it in large quantities, and offer at a rate that should lead to its lavish use as a cover plant in shrubberies and around ponds and streams.

No. 1. S. Old-gold. F. Rich, royal-purple.

No. 2. S. Bright golden yellow. F. Heavily veined red-brown.

No. 3. S. Bronze. F. Bronzy purple.

No. 4. Smoke-color.

I. Pseudo-acorus. Golden yellow and cream.



German Iris in the garden of Mrs. Robert L. Stevens, Westbury, L. I. Every few steps the path discloses a new and delightful scene or surprises one with some beautiful and rare flower. Daniel Langton, Landscape Architect.



Siberian Iris with its pure navy-blue color can be extensively planted in damp or dry ground

Iris Kämpferi. Japanese Iris. This most beautiful class is found in but few gardens. They are the largest hardy flower of their season, often 8 inches in diameter. The colors are pure and delicate, and the culture of the easiest. They bloom after all the other Iris and before the Phlox. They are particularly appropriate for naturalizing in moist ground, although thriving well in ordinary garden soil. The colors include pure white, deep blue, dark purple, pink-lavender, lilac, maroon, and many rich combinations.

I. Sibirica. Siberian Iris. Intermediate in season between the German and Japanese, it blooms in June with a solid sheet of purest and deepest blue. The flowers are like the German, but more slender and much more numerous, so that a group looks like a deep blue rug. We offer it in quantity, at low rates, permitting its use along salt marshes, streams, in groups of shrubs on upland and in gardens. Its pure color permits it to harmonize with its surroundings, both in and out of the garden.

I. cristata. This differs from all other Iris in height and earliness, and is better classed with the Crocus, Pansy, and English Daisy. It opens its blue stars close to the ground in early May. It can be used for naturalizing in the grass, for garden borders, and spring bedding and carpeting at the edge of groups of shrubs. We offer it so cheaply that it can be used in quantity.

I. pumila hybrida. These are a valuable recent addition to the garden. They resemble the German Iris, but are much earlier, being among the most conspicuous and beautiful garden flowers of early May. Very good for bordering, 9 inches. We recommend them highly and offer strong plants.

I. Cyanea. Darkest blue. A regal flower, sure to be admired.

I. Eburnea. Pure white, with creamy shadings.

I. florida. Sulphur-yellow.

KNIPHOFIA Pfitzerii. Flame-flower. Red-hot-poker Plant. As certain to attract attention as any flower in the garden. It is a spike of rich orange-scarlet, over 12 inches long, on a tall, bare stem 3 feet high. It blooms so continuously from August to November as to make it almost indispensable. Native of South Africa. It is safer to mulch it in winter.

LATHYRUS latifolia. Hardy Sweet Pea. A vigorous, healthy vine, growing about 5 feet high, or clambering over shrubs and bearing clusters of rose-colored or white flowers the size of the Sweet Pea. Grows on very sterile soil and can be used for wild gardening and in the flower-garden.

LESPEDEZA Sieboldi; syn., **Desmodium penduliflorum.** A shrub-like plant about 3 feet high, densely covered with gracefully curving sprays of magenta-pink pea-shaped flowers in early September.

LIATRIS pycnostachya. Kansas Gay Feather. A showy garden plant with spikes 5 to 7 feet high of light rosy purple flowers. In August and September it attracts much attention from those passing our Nursery.

LILIUM candidum. Annunciation Lily; Madonna Lily. This thrives well in the garden or in beds of Rhododendrons. It is best planted in August or September, as it makes an autumn growth.

L. umbellatum. This blooms in June. The color is bright red with black spots.

L. speciosum roseum. These are hardy and easy to grow. The flowers are very beautifully shaded with red on a white ground. They are about 8 inches in diameter and appear in midsummer.

L. speciosum album. A white variety.



Iris cristata in rock-garden. It is equally good as a border or naturalized in the grass where it will take care of itself like the violets.

Lilium tigrinum. Tiger Lily. This is one of the most vigorous of the family and well able to maintain itself in the garden or along roadsides. It grows 3 or 4 feet high and is propagated from the little black bulblets at the base of the leaves. The color is an orange-yellow, spotted with black.

LYCHNIS viscaria fl. pl. Ragged Robin. Double red. Makes the most brilliant bed in the garden in its season. The flowers are so dense as to make a solid mass for several weeks in June. The plant and flower resembles the June Pink in form. It has long, dense-flowered spikes of rich, deep rose-red, very double flowers of pleasant fragrance.

L. Chalcedonica. Lamp Flower; London Pride. Orange-scarlet of great brilliance. No other hardy plant of our acquaintance approaches it in the fiery brilliance of this color. It is about 2 feet high and blooms all summer.

L. Haageana. The colors range from that of the last to crimson. The flowers are larger and lower.

LUPINUS macrocephala. A showy perennial with an upright spike of blue pea-shaped flowers like the Wistaria. It is about 1½ feet high, with leaflets radiating like a wheel and will thrive in dry soil.

LAVANDULA vera. Lavender. The fragrance of the gray-lavender foliage brings pleasant associations to the mind. It will thrive if protected with mulch in the winter.

MENTHA piperita. Common Peppermint. If in the garden it is ready for mint sauce.



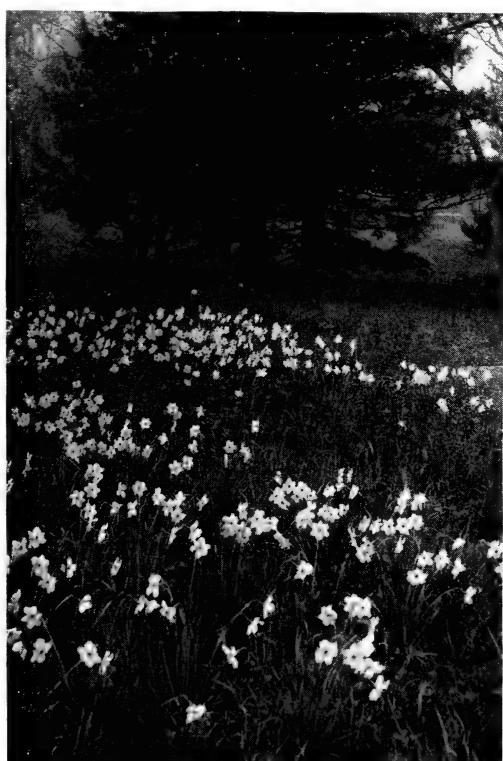
Lychnis viscaria flore plena, showing its even and solid display of color

MONARDA didyma. Oswego Tea; Bee Balm. The flowers are bright scarlet and so abundant as to make the most brilliant corner of the garden. The humming-birds fly back and forth in ecstasy over it. The flowers appear in June and continue all summer. The foliage has a pleasant, mint-like fragrance. We recommend it highly for garden and shrub border.

MONTBRETIA Crocosmiaæflora. A summer-flowering bulb, with a slender spike of golden orange flowers in midsummer. It should be scattered in groups between other flowers where it takes up little room.

MYOSOTIS palustris semperflorens. Forget-me-not. Blooms freely in early spring and continues half the summer.

NARCISSUS. The charm of many old gardens and the touch of beauty in many cottage door-yards is given by the clumps of Daffodils and Narcissus that bloom in early spring. Many hesitate to plant these in quantity because of the expense of planting large quantities of the imported bulbs, and also because the admiration for them is in spring, and the time to plant is in autumn. We have collected a quantity of bulbs from old farm-yards where they have been growing for many years and, therefore, there is no question of their hardiness and ability to withstand all the different rodents and insects and fungi that scare the timid planter. The main thing is to get the bulbs in the ground and the simplest way is to order a thousand, which may be delivered from August till midwinter, and plant them in groups of twenty or more, 6 inches apart in the flower-garden or in belts of a thousand at the border of a shrubbery or in the grass where the lawn mower will not cut them until after their growth in May. There are many points where the grass need not be cut in May, as along the house foundations, or at the border



Poet's Narcissus in the grass. This is possible on almost any lawn. The yellow Daffodils will come two weeks earlier in April.

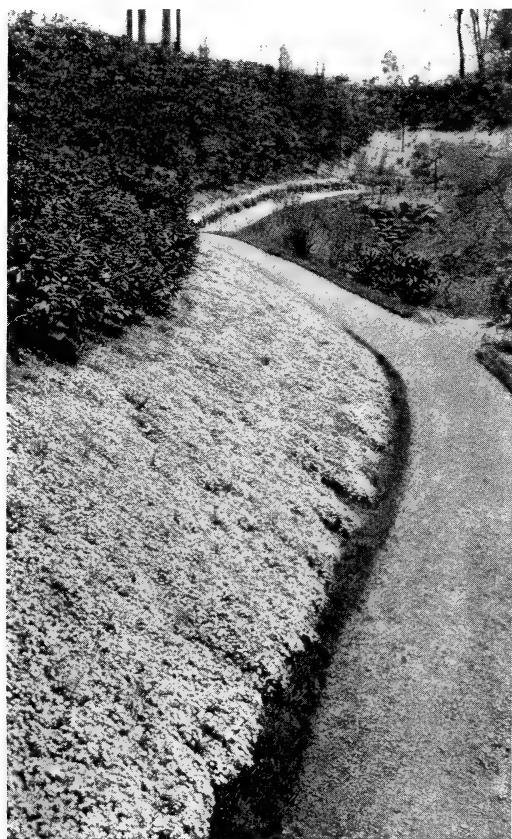
Narcissus, continued

of the woodland, where these plants will go on increasing year after year with no trouble at all. Our stock includes the large single yellow Daffodil and the double yellow Daffodil.

N. poeticus. Poets' Narcissus. These are the ivory-white flowers with carmine-tipped cups that bloom in early May after the Daffodils have passed. They thrive and multiply and in old gardens hereabouts there are wide borders of them that must have been planted nearly half a century ago.

ENOTHERA Missouriensis. Sometimes the question is asked how to make the garden attractive in the evening. These will open just at night-fall, their large, almost luminous sulphur-yellow blossoms about 5 inches across, to attract the night-flying insects. It is a low, trailing plant.

PÆONIA Sinensis. There has been a recent enthusiasm for the Peony which is based on its permanent merits of vigorous growth, hardiness and showy flowers. They grow 2 to 3 feet high, and equally broad, forming a shrub-like mass of foliage, maintained in good condition throughout the season. The flowers are large and showy, borne on long stems, making them excellent for cutting. The Peony is equally appropriate in the garden, among shrubs, against the foundations of a house, or in a bed on the lawn. Our col-



Moss Pink, Phlox subulata. This picture does not show the most beautiful design with Moss Pink and Rhododendrons, but it shows its ability to hold steep dry banks better than grass.

Pæonia Sinensis, continued

lection includes a range of colors from white through various shades of cream and pink to dark red. The plants are large and well established and will give good results. If needed for planting in May, they can be taken up with a ball of earth. Autumn or early spring planting is preferable.

P. officinalis. This is the true old-fashioned Peony that was used in colonial days for dyeing wool and decorating our grandmothers' gardens with their brilliant crimson flowers. It blooms about two weeks earlier than the other Peonies and differs from them in foliage, as it dies down in midsummer and, therefore, should be planted in the flower-garden where other plants will occupy the space later.

P. rubrum. Brilliant, glowing, deep crimson.

P. roseum. Bright, clear pink.

P. alba. Blush-white.

PAPAVER orientale. Oriental Poppy. This flaunts its showy flower more conspicuously than any other hardy garden flower. It is a big, floppy flower about 8 inches in diameter, on a stem 3 feet high. It makes a gorgeous effect in the garden.

P. nudicaule. Iceland Poppy. A dainty little plant, with delicate white, yellow and orange-scarlet flowers in early spring and throughout the summer. It is a perennial as pretty as the Shirley Poppy, but with colors not found in the annual Poppies.

PENTSTEMON barbatus, var. **Torreyi**. This very valuable garden plant has been overlooked. It is showy in mass and excellent as a cut-flower because of its long, and graceful stems. The flowers are a brilliant scarlet without admixture of other shades. They are little Foxglove-like trumpets borne on slender, nodding stems about 4 feet high from June till August.

PHLOX decussata. Among the many varieties offered, we have selected the following as representing a good example of each color. Their culture is of the simplest. Some ask why a collection apparently reverts to the magenta-pink colors after a few years. This is because seedlings come up between the others. This can be easily prevented.

Bridesmaid. Pure white, with crimson center.

Coquelicot. Pure scarlet, carmine eye. The finest red yet known.

Eclaireur. Purplish crimson, with white halo.

Pantheon. Salmon-rose; late.

Pink Beauty. Pale pink; enormous panicles. Mid-season.

Queen. Large, pure white; late.

Fiancee. Pure white, large panicles; mid-season.

General Chanzy. Scarlet-pink; fine.

P. suffruticosa, Miss Lingard. This blooms about six weeks earlier than the others, commencing in May and continuing throughout the summer. The foliage differs in being glossy and pointed. The flowers form an upright panicle of white, with a delicate pink eye, and are very showy for bedding or as cut-flowers. They should be in every garden.

P. suffruticosa, Lemoine. A pure white form; very valuable.

P. subulata. Moss Pink. Economically, this is cheaper than grass on dry terrace banks, road banks, gravelly hillsides, tops of walls and ledges, for it is native to the latter position in this state. We have sold many thousands for these purposes,

Phlox subulata, continued

and they have been permanently satisfactory. They need only to be planted about 1 foot apart, more or less, and they will spread and cover the ground completely, excluding weeds, especially in dry situations. People are so accustomed to think of grass, Privet hedge, Norway Maples and Geraniums as the principal plant materials of landscape gardening that the introduction of cover planting makes slow headway. Has no bad habits, stays where it is put and does not make a weed by spreading where it is not wanted.

We are occasionally asked if there is not some plant that will make a lawn and not require cutting. This is the best for dry, sunny situations, and Myrtle for shady, moist situations. In the Italian garden on the estate of Mr. Stanley Mortimer, Roslyn, L. I., there are several acres of cover planting and no grass. The Phlox subulata is used on the sloping terraces. No top soil was used to prepare them for planting. In May the broad sheets of white and red and pink can be seen from Meadow Brook, a distance of 5 miles. In September it blooms again, but not so profusely. The first cost need not deter any one from planting it because every little piece will grow and a little patch this year will supply twenty times the area next year. It can be planted at any time of the year, even when in full bloom, or in the dry season of August and September. Besides the species which is purplish pink in color, there are several varieties:

Alba. Pure white. Useful for edging garden beds and mixing with the other varieties.

Lilacina. A lilac-blue in color.

Dark Red. A beautiful variety, of a distinctly different shade.

Pink. An excellent pink variety.

PHYSOSTEGIA Virginica. False Dragon Head. A rare and beautiful flower which compels admiration both in the garden and as a cut-flower. It blooms during July, August and September. It grows about 2½ feet high. The color is a delicate shade of pink as sometimes seen in heather blossoms. We advise its general use.

P. Virginica, var. alba. Flowers pure white, of a very delicate beauty.

PLATYCODON grandiflorum. Chinese Bell-flower. It has big blue and white flowers like the Canterbury Bell all summer. The balloon-shaped buds are also interesting.

POLYGONATUM giganteum. Solomon's Seal. Some call this a giant Lily-of-the-Valley. It has graceful, arching stems about 2½ feet high, bearing pairs of leaves and drooping bells at each axil. It makes graceful clumps in a flower-garden and is still more harmonious with tall ferns.

PRIMULA veris. English Cowslip. These are beautiful early spring-blooming plants, with yellow, orange and maroon flowers. They are welcome additions to any garden, and may be planted in nooks between the grass and shrubs where they will give a smiling response to the spring sunshine.

P. vulgaris. English Primrose. Low-growing, tufted plants, with bright yellow, fragrant flowers early in spring. About 6 inches high.

PYRETHRUM roseum. These have flowers like the annual China Aster, but they appear in May and early June and continue throughout the summer. The foliage is low, neat and fern-like, and the flowers are on long, slender stems, about 1 foot high. The colors are white, pink and deep red, single, semi-double and double.

RANUNCULUS acris flore pleno. Double Buttercup. This is the same as the weed growing in damp pastures, only its weedy character is eliminated, as it produces no seed, and the very double, shining, golden yellow flowers are so numerous as to make a solid bed of color in May and June. It grows about 2½ feet high and is worthy of place in the flower-garden, the wild garden and the children's garden.

RUDBECKIA laciniata, "Golden Glow." This almost rivaled the Privet in its sudden distribution after its discovery among some wild plants in the West. However, some dislike it because it looks ragged when going out of bloom. Cut it off and a new growth comes on with a later set of flowers. It may be used among shrubbery, which helps hold up its tall stems. It forms a quick hedge that can enclose a flower-garden or screen unsightly objects and is, therefore, to be commended for rented property, where the garden is for one or two seasons only.

R. triloba. One of the best yellow Daisies or "Black-eyed Susans" which does not have a weedy appearance. It makes a compact, round bush, about 2 feet high, evenly covered with yellow flowers of moderate size, which continue in bloom for over a month.

R. purpurea. Giant Purple Cone-Flower. A large sturdy flower of peculiar reddish purple color, suitable for the background in flower-gardens or the wild garden.

SALVIA azurea, var. *grandiflora*. Meadow Sage. Like the Gentian, this has the shade of blue that is all too rare in gardens, and every opportunity should be taken to keep up a continuous supply of the blue flowers. This blooms in August and September until hard frost. It is about 2 feet high, with a slender open panicle.

SAGINA. This makes a sheet of emerald moss, carpeting the ground like a deep-piled velvet. It always calls out admiration but it is amusing to know that few buy it. There has not yet developed in this country as in England, a taste for alpine gardens, where small plants are admired.

SEDUM acre. On rock ledges or walls this thrives perfectly and delights in the drought. It will run through the grass on gravelly banks, and make a thicker bottom to prevent washing, and yet it will not make a weed. The starry yellow flowers make a brilliant show in early summer.

S. album. A white-flowered species, growing about 6 inches high, which makes a solid mat of foliage like the Moss Pink, and can be used in the same positions.

S. spectabile. Brilliant Stonecrop. Japanese Liver-forever. This is a sturdy plant, with thick, fleshy leaves, covered with broad clusters of rose-colored flowers in late summer.

SILPHIUM perfoliatum. Cup Plant. A plant as tall and showy as the Golden Glow, with single lemon-yellow flowers. It finds a proper place at the back of wild-flower borders, among shrubs, or bordering a pond. July and August.

STOKESIA Cyanæa. Cornflower, or Stokes' Aster. This is a new plant, which receives admiration from every one who makes its acquaintance, both in the garden and in the house. The flowers resemble the China Aster, but they are semi-double, about 3 or 4 inches across and of a pure blue in several shades. It grows about 1 foot high and makes a neat rosette of foliage under the wide-branching flower-stem. It continues in bloom from July until frost. It is of the easiest culture and we recommend it highly.



A garden that does not require expensive grading, but fits the natural contour of the land. Just fertilize the land and plant. This illustrates both gravel or broken stone and grass paths, the latter being preferable in appearance and economy in most situations, as it will stand considerable traffic, does not wash, forms a harmonious setting for the flowers and is not glaring to the eye. The plantation consists of Lilacs and other shrubs with a border of hardy flowers interspersed with the Poet's Narcissus. View on the estate of Prof. Chas. S. Sargent, Director of Arnold Arboretum, Harvard University.

STACHYS Betonica rosea. Woundwort. A mat of foliage with spikes about 1 foot high, of rosy pink flowers in June and July.

S., var. *alba*. White flowers.

S. Lenata. As an edging, this has a distinct value.

THERMOPSIS Caroliniana. One of the beautiful plants that are but little known. Like other members of the Pea family, it thrives in dry, sterile situations and, is therefore, fitted to thrive among shrubs and in many places on Long Island. This lupin-like flower grows about 3 feet high, with a cylindrical spike of yellow pea-shaped flowers in June and July.

THYMUS Serpyllum, var. *citriodorus*. Lemon Thyme. A low mat of aromatic evergreen foliage about 8 inches high, used for flavoring. It is a pretty garden plant for dry borders and the bees like the tiny flowers. It has escaped to the grass under the Pitch Pines at Brentwood.

T. serpyllum variegatus. Golden Thyme. Clear yellow mottled foliage.

TRADESCANTIA Virginica. Spiderwort. Clusters of shining green foliage about 1½ feet high, and bright blue flowers. It was a favorite in old cottage gardens as shown by the fact that where the house is gone there will remain around the moldering cellar walls the Spiderwort, Lilac and Matrimony Vine.

T., var. *alba*. White flowers.

TRICYRTIS hirta. Japanese Toad Lily. In September and October this has small, lily-like orange-white, brown-spotted flowers. It grows about 15 inches high.

TROLLIUS Europaeus. Globe Flower, or Golden Ball. A Buttercup-like plant which has bright

TROLLIUS Europaeus, continued

yellow flowers from May until October. The flowers are about 1½ inches across and, therefore, valuable for house decoration. It is particularly welcome in the garden in early spring and is as important as the Cowslip and English Daisies.

VALERIANA officinalis. This is a favorite in old gardens and should be more frequently seen to-day. It grows about 3 feet high and in June and July has large clusters of light lavender-pink flowers with Mignonette fragrance. Like the Baby's Breath, it is a good flower for making bouquets.

VERONICA Amethystina. A thick mat of foliage covering the ground, sending up spikes of bright amethyst-blue flowers. A good cover plant.

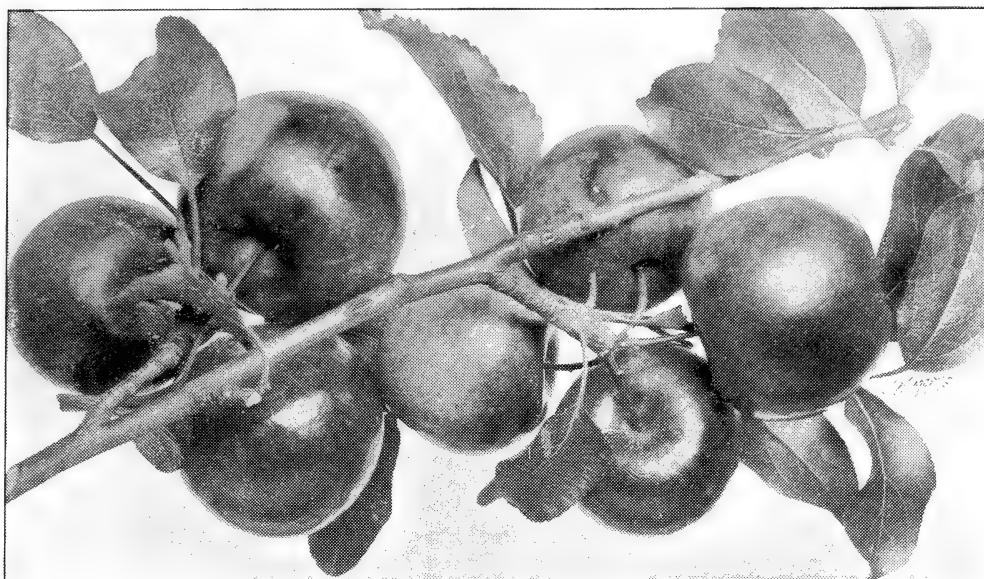
V. longifolia, var. *subsessilis*. Blue Jay Flowers. One of the best blue flowers, producing from May till September a great profusion of spikes of the richest deep blue. It is a good garden plant and always welcome as a cut-flower.

V., Dwarf. A low form of the Speedwell, with deep blue flowers in May and June.

VINCA. Myrtle, or Periwinkle. A beautiful evergreen cover plant for garden borders in place of Boxwood edging. Leaves shining, rich green, with flowers of clear blue in May. For uses, see under Broad-leaved Evergreens, page 70. 6 inches. Low rates per thousand.

VIOLA (Violet), Double Russian. A hardy variety, blooming in April and May, with large, double, deep purple flowers. Very fragrant.

YUCCA filamentosa. Adam's Needle; Spanish Bayonet. The value of this for dry soils and as an evergreen foliage plant is described on page 73.



Apples can be successfully grown for home use on all parts of Long Island if spraying is annually attended to, but they thrive especially well on the hills and the north plateau

Fruits for Long Island

Don't let the San José scale scare you out of having the good things your land can easily produce. Don't deceive yourself and think you can buy them and have just as good or as plenty. The scale is a bug-a-boo that can be controlled on young trees and kept in check on old ones. Many ask if the scale is decreasing. We cannot say that it is, but we can say that the lady-bird beetle which feeds on it is increasing. It is the little red beetle with two black spots, which comes into the house in the autumn.

It is amusing to hear the owner of ample land ask if a dozen Peach trees will not be enough. It makes no difference to us,—we net only a few cents profit. Some will go without Peaches because the trees are short-lived or because they do not bear every year.

We do not expect the fruit or dairying industry rejuvenated on Long Island. The soil and markets are better adapted to vegetables; farms may be sold for residence purposes before orchards get in full bearing. Nevertheless, those who do live on Long Island can and should grow some of their fruit. It may be better to buy winter Apples, but the fruits of summer and autumn cannot be bought of as good quality, freshness, and in the continuous supply that the home orchard will furnish.

"Why don't we get good Peaches any more?" is a frequent question. Because they are picked before ripe and shipped so far, and because the most juicy varieties do not ship the best. Be sure to grow some fruit if you have the land and a spade and a cultivator. Get the literature on the subject from the New York State Experiment Station, Geneva, New York; Cornell University Agricultural Experiment Station, Ithaca, N. Y.; New York State Department of Agriculture, Albany, N. Y., and the United States Department of Agriculture, Washington, D. C. State what fruits you are growing and, if any troubles assail them, send samples of the insect or fungous enemy.

Spraying for San José scale is not difficult or impractical work. It is disagreeable, but our men use oilskins and rubber masks and gloves when applying the lime-sulphur spray. We boil it in barrels by a jet of steam from a small \$40 boiler and use a Niagara Gas Sprayer. The pressure for spraying is supplied by compressed carbonic acid gas as supplied to soda fountains. A simpler spray is miscible oil, as Scalecide, sold by B. G. Pratt Co., 11 Broadway, New York, or Target Brand Scale Destroyer, sold by the American Horticultural Distributing Co., Martinsburg, W. Va. These do not require boiling, and can be applied by a cheap pump. Make two applications in the winter, so that all the parts are covered. Do not put on too much; cover the plants as with dew.

PLANTING.—Cut off broken roots and cut the ends of large roots smooth. Dig a wide hole, deep enough to let the tree stand at the same depth as in the nursery. Spread the roots out and pack the soil firmly around them.

PRUNING—Blackberries and Blackcaps. Cut back to near the ground when planted. Cut off the tops of the young shoots in summer when 2 feet high. This will make them branch, produce more fruit, and stand up better. Do not neglect this pruning until the canes are 6 feet high. Allow but four to six canes per hill. Remove the old canes after fruiting, and the following spring shorten-in the side branches. In a small garden, tie to a wire, trellis or stakes.

Red Raspberries. Prune same as above excepting the summer pruning.

Currants and Gooseberries need but little pruning; merely remove the branches over two or three years old.

Apple, Pear, Cherry, Peach, Plum and Quince. When planting, prune to reduce the top by one-half or three-quarters. Cut just above a strong bud. Do not leave opposite branches, that form crotches to be easily broken.

Later Pruning. Thin out the inside of the tree by removing weak branches, water sprouts or suckers, and branches that cross and rub. Some cut back one-half of each year's growth of the peach, on rich soil. If the flower-buds are partly winter-killed, omit this cutting back, as it reduces the flowers and fruit.

Cut all the branches close, even if the wound is larger, and paint all wounds over 2 inches in diameter with coal-tar or thick paint. Old decayed cavities should be cleaned out to sound wood, painted and filled to the inside line of the bark with cement. Split crotches should be bolted together at or above the break. We furnish experts for this work.

Grapes. Cut grape-vines back to two buds when planting. Train the two shoots from these buds to a trellis or building, and the shoots from them will bear the following year. The next winter these shoots may be cut back to spurs of one or two buds, or the whole arm cut off to the trunk of the vine, and the new canes tied to the wire as before. During the summer, bearing shoots may be allowed to hang down, or tied to upper wires.

Time to Prune. Most severe pruning should be done between October and April, when the plant is dormant.

Heading back too vigorous shoots, and removing undesirable branches, may be done at any time during the summer. Storm-damaged trees and decayed wounds may be repaired whenever necessary.

CULTIVATION and FEEDING (Fertilizing). All young fruit plantations should be kept cultivated the same as corn or potatoes; in fact, vegetables may be profitably grown in young orchards. Cultivate once in two weeks or oftener, and especially the day following a heavy rain. This will make a mulch of about 3 inches of fine earth or dust, that prevents evaporation from the soil. Feed annually with stable manure or complete fertilizers, or both. Trees need a fertilizer rich in potash and phosphoric acid, rather than an excess of nitrogen; therefore, muriate of potash unleached hard-wood ashes, bone-flour and dissolved South Carolina rock are good special fertilizers. Crimson clover is valuable as a green manure, sown in August, before the last cultivating, and plowed under the following spring.

Borers in the trunks of trees should be dug out. Leaf-eating insects are killed by spray of Paris green, 1 lb. to 100 gallons of water. Currant-worms are quickly killed by hellebore powder. Leaf-sucking insects are destroyed by spraying or washing with whale-oil soap or kerosene emulsion. Mildew, and other fungous diseases of grapes and fruit trees are prevented by spraying with Bordeaux mixture or ammoniacal solution of carbonate of copper.

Distances to Plant Trees and Plants

Apples	30 x 30 feet,	48 trees per acre
Pears, Standard, and Cherries	25 x 25 "	70 " "
" Dwarf	12 x 12 "	300 " "
Peaches, Plums and Apricots	18 x 18 "	135 " "
Grapes	10 x 16 "	275 vines "
Asparagus	2 x 5 "	4,250 plants "
Currants and Gooseberries	2 x 4 "	5,450 bushes "
Raspberries and Blackberries	3 x 6 "	2,420 plants "
Strawberries	1 x 3 "	14,500 " "

Closer planting and pruning is advised for small gardens.

THE VARIETIES ARE GIVEN IN ABOUT THE ORDER OF RIPENING**APPLES**

**Price, 5 to 6 feet, 35 cts. each, \$3 for 10; 6 to 7 feet,
50 cts. each, \$3.50 for 10**

In our old and extensive orchards, most of the varieties here listed, and many others that have been discarded, have been tested. While some varieties will thrive anywhere under good culture, the loss entailed by planting and cultivating poor varieties is great, and emphasizes the importance of planting tested kinds. Many good varieties will occasionally fail to produce satisfactory crops through lack of culture and fertility, or insects and fungus.

LARGE ORCHARDS. Those intending to plant large orchards are invited to correspond with us early in the season, before October or March. Low rates for trees of various qualities will be quoted.

SUMMER APPLES

Yellow Transparent. The earliest Apple. Medium size; skin translucent yellow, with waxy surface; flesh yellow; sprightly acid. July. Usually bears the first year after planting.

Harvest. Medium size; pale yellow; flesh white, tender and juicy; rather acid but pleasant. Ripens in July.

Red Astrachan. Large, round; deep crimson, which takes a bright polish; flesh juicy. A vigorous, productive tree. Good for early market and dessert.

Sweet Bough (Early Bough). Large; pale yellow; tender, sweet. An excellent variety for baking.

Oldenburg (Duchess of Oldenburg). A Russian variety of value; fruit above medium size, handsome, yellow, covered with streaks of crimson; flesh tender, juicy and pleasant. August.

AUTUMN APPLES

Gravenstein. Large, round; red and yellow; flesh firm, brittle, juicy, high-flavored, subacid. Tree vigorous and productive. A long time in ripening during August and September. This is the best market Apple of its season, and deservedly popular.

Wealthy. Medium size; skin oily, dark red; flesh white, fine-grained, juicy, subacid. Tree a free grower and early bearer. Resembles the Fameuse. October and November.

Fall Pippin. Very large, round; rich yellow; flesh yellow, firm, tender, creamy and excellent flavor for dessert or cooking. Tree vigorous and productive. An old and well-known variety, more subject to apple-scab than some others. It ripens in late autumn and keeps in good condition until midwinter.

McIntosh Red. A good-sized Apple, resembling the well-known and popular Fameuse; flesh tender, white and sprightly.

WINTER APPLES

Fameuse (Snow Apple). Small to medium in size, round, deep crimson; flesh snowy white, with crimson streaks; very tender, crisp, spicy and melting. One of the finest dessert fruits. November and December.

Winter Apples, continued

Hubbardston (Hubbardston's Nonesuch). Large, handsome, yellow, mostly covered with red; flesh tender, fine-grained, with an excellent and distinct flavor. Tree upright and productive. Does not keep after midwinter.

Smokehouse. Large, flat, red and yellow; flesh yellow, firm, juicy and crisp; aromatic. An early and prolific bearer. Widely grown and popular. October to January.

Rhode Island Greening. Large, round, green or greenish yellow; flesh yellow and fine-grained, tender, with a rich subacid flavor. A favorite for cooking. A standard winter Apple. November to March.

Bellflower. Medium to large; pale yellow, with bluish cheek; flesh very tender, crisp, juicy, with a delicate spicy flavor; core large. Succeeds best on rather light soils.

King (King of Tompkins County). A large, handsome red Apple of fair quality. Tree a good grower and moderate bearer.

Spitzenburg (Esopus). Medium rich red Apple, with crisp yellow flesh of a spicy acid flavor. A good keeper.

Jonathan. Of medium size; skin yellow, nearly covered with dark red, fine-grained; very tender, and of excellent flavor. It commands a high price on the market. Tree needs careful culture. November to January.

Baldwin. Large, red, with yellow on one side; crisp, juicy and rich. Tree vigorous and productive. A standard variety. November to April.

Roxbury Russet. Medium or large size, russet; flesh greenish white, crisp, with a fine subacid flavor. Tree a good grower and productive. Keeps late.

Peck's Pleasant. Medium to large; waxy yellow, with bluish cheek; resembles the Newtown Pippin; flesh yellow, fine-grained, crisp and brittle. We regard it as the best-flavored Apple. December to March.

Long Island Russet. A small to medium-sized yellow and russet Apple. The tree is most vigorous and productive, and the fruit keeps till May. On some Long Island soils it appears as healthy as an oak, overcoming the usual Apple enemies.

Newtown Pippin. A famous Apple, originating on Long Island. Fruit dull green; flesh greenish white, juicy, crisp, with fine aroma and delicious flavor; late keeper. Tree a feeble grower. It succeeds well in the heavy loam soil of Jericho, Huntington, Port Washington. January to May.

For home use, the following will cover the season: Yellow Transparent, Red Astrachan, Gravenstein, Fall Pippin, Rhode Island Greening, Baldwin, Roxbury Russet.

CRAB APPLES

For preserving, jellies and ornament.

Montreal Beauty. Large size of its class; yellow and rich red; flesh rich, firm, acid. September and October.

Transcendent. One of the best early varieties. Golden yellow, with a red cheek. September.

PEARS

Price, 5 to 6 feet, 50 cts. each, \$3.50 for 10; 6 to 7 feet, 75 cts. each, \$6 for 10

Summer Doyenne (Doyenne d'Ete). Small; flesh white, melting, sweet. Tree vigorous and productive. Ripens in July.

Manning's Elizabeth. Small to medium; yellow, with a red cheek; sweet and sprightly. Our best early dessert Pear.

Osband's Summer. Medium size; yellow, with reddish brown cheek; flesh white, granular, with sweet flavor. Ripens in early August.

Clapp's Favorite. Large, long; yellow, with red cheek; flesh fine-grained, melting, and of excellent flavor. It resembles the Bartlett, but is much earlier. It should be picked a week before it would ripen on the tree, and be ripened in the house, otherwise it softens at the center. A valuable Pear that should be in every garden. It ripens in August.

Bartlett. A standard sort too well known to need description; bears young and abundantly. It ripens in August and September, and is an excellent variety for dessert and preserving.

Tyson. Medium size; bright yellow; flesh juicy, sugary and aromatic. A regular bearer.

Boussock. Large; russet-yellow; flesh melting and of excellent flavor. The tree is large and vigorous. A valuable market Pear. October.

Sheldon. Large; greenish russet and red; flesh coarse, of fine flavor. Productive. September and October.

Howell. Rather large; waxy yellow and russet; flesh granular, with a rich subacid flavor. A profuse bearer and good for preserving.

Seckel. Fruit small; brown, with a deep red cheek; flesh very fine-grained, sweet and juicy; the richest and highest flavored Pear known. Tree of small size and slow growth. Early to mid-autumn.

Anjou. Large; green and russet; flesh white, buttery, with a rich, vinous flavor. Very productive. October and November.

Bosc (Beurre Bosc). Large, long; russet; flesh buttery, juicy, with rich and excellent flavor. It requires clay soil to reach perfection. November.

Kieffer. This is a descendant of the Chinese Sand Pear, and comes from the home of the San José Scale. Therefore it does not succumb to this troublesome pest. Its immunity and vigor render it an excellent variety for cross-breeding to improve the flavor. Large to very large; yellow-russet, with red cheek; very juicy and of a peculiar flavor disliked by some when not properly grown and ripened. The general appearance of the tree is distinct; its growth is exceedingly vigorous, with dark, lustrous foliage. Some Long Island farmers have found it very profitable for market. It should be severely thinned when the fruit is small. December.

Pears, continued

Winter Nelis. Medium size; dull russet; flesh fine-grained, with a rich, sprightly flavor. November and December.

DWARF PEARS

Price, two and three years old, 50 cts. each

The following varieties, grafted on quince roots, succeed as dwarfs, and are valuable for small gardens:

Louise Bonne de Jersey. A large, beautiful yellow Pear, with a red cheek; rich flavor. Vigorous grower and an abundant bearer. September and October.

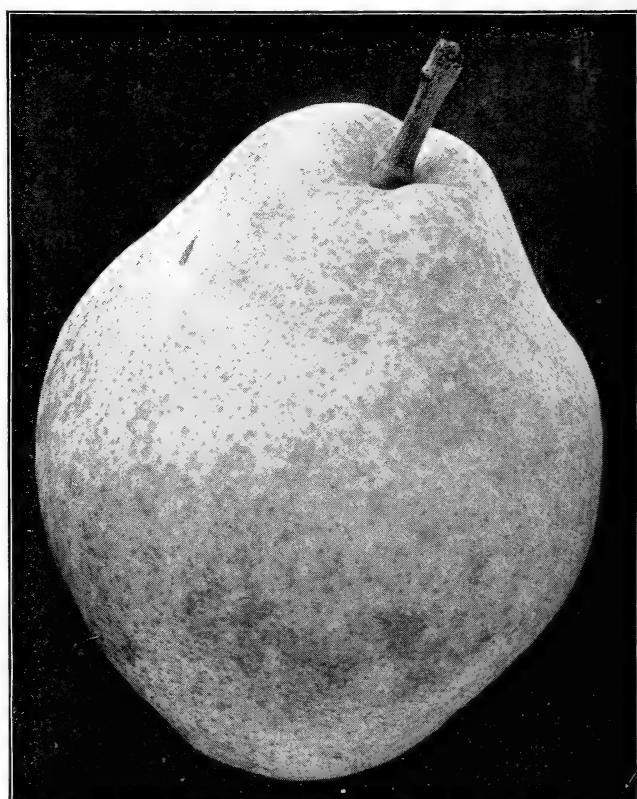
Angouleme (Duchesse d'Angouleme). One of the largest of the good Pears. Oct. and Nov.

PEACHES

Price, one-year, 4 to 6 feet, 25 cts. each, \$1.80 for 10, \$15 per 100; two-year, 40 cts. each

For early bearing and general satisfactory results, no fruit tree exceeds the Peach. They will commence to bear sixteen months after planting, and produce abundant crops nearly every year. Fertilize with wood-ashes or potash. A new supply of trees should be planted every two or three years, in order to keep up a succession. This list is nearly in order of ripening.

The same skill that has developed the vegetable growing of Long Island to its high position will



When fully ripe, the *Kieffer Pear* is large and yellow with a red cheek, and very juicy

Peaches, continued

make the poorer land of Long Island profitable with Peaches. The local market is never supplied. The railroads should coöperate to develop an extensive Peach industry on the hills of Suffolk county.

Early Rivers. Large, white, juicy.

Champion. Large, creamy white and juicy. Said to be one of the most frost-proof of Peaches. An excellent early Peach.

Mountain Rose. Above medium size, round, white. Tree thrifty and an abundant bearer.

Yellow St. John. A large yellow freestone, with a deep red cheek; flesh yellow, sweet, juicy and high-flavored. One of the best early Peaches.

Early York (Honest John). A large, beautiful white Peach. A valuable variety.

Foster. A very large Peach, resembling Crawford's Early, but earlier in ripening.

Crawford's Early. A magnificent, large, yellow Peach of good quality; tree vigorous and productive. September.

Oldmixon. A productive variety that succeeds well in all localities. Flesh white, red at the stone, flavor excellent. A favorite canning variety.

Wheatland. Considered an improvement on Crawford's Late, and ripening just in advance of it.

Stephen's Rarereipe. Large, oblong; white flesh, red skin. A heavy bearer: October.

Reeves' Favorite. Large; yellow, juicy, melting, with a vinous flavor.

Elberta. One of the finest yellow Peaches; very large, handsome, juicy and of fine flavor.

Susquehanna. Very large; rich yellow, with a beautiful red cheek. A handsome and valuable variety for table use or canning.

Crawford's Late. A standard variety. Large; yellow, red at the stone.

Stump the World. Medium size; creamy white, juicy and high-flavored. Unexcelled for preserving.

Chair's Choice. Large, yellow, with red cheek; flesh firm and of good quality. The large Peach growers of Long Island report that this is a valuable variety.

Morris White. Medium size, creamy white skin; flesh white throughout, juicy, sweet. Good for preserving.

Globe. Large, golden yellow, firm, sweet and delicious. A rapid grower and good bearer.

Smock. Medium to large; yellow, moderately juicy to dry; very late; sometimes it does not ripen here.

JAPAN PLUMS

Price, 5 to 6 feet, 40 cts. each, \$3.50 for 10; 6 to 7 feet, 75 cts. each, \$6 for 10

This new class of fruit we have thoroughly tested, and strongly recommend its planting in gardens and orchards. After one or two years the trees bear heavy annual crops of delicious fruit.

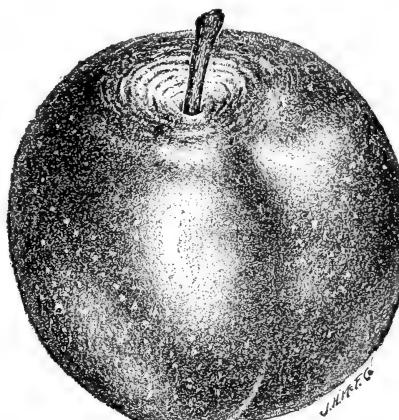
The peculiarly desirable features presented by these Japanese Plums on a conservative estimate are earliness and great productiveness. The quality is good when well thinned and ripened, but not always equal to the best of the common Plums.

They are the best Plums for Long Island and should be largely planted.

Japan Plums, continued

Abundance. Medium to large, globular; yellow, mostly covered with red; flesh firm and juicy, sweet and good when fully ripe. The tree is very productive, and the loads of fruit that young trees carry astonish all who see them. The fruit should be severely thinned out and the branches tied up. Ripens in early August.

Apple. One of the good varieties introduced by Luther Burbank. The fruit is large and attractive, of a deep reddish purple color when fully ripe; flesh red and firm, with a small pit and of very good flavor. It ripens about the same time as the Burbank, and is an excellent keeper. We recommend this as the finest flavored Japanese Plum in our orchard.



Japanese Plum. This class thrives excellently on Long Island and bears so heavily that the branches need propping up, or preferably the fruit should be thinned, which improves the size and flavor and checks the spread of the rot.

Burbank. Medium to large; yellow, with red cheek; flesh firm, rich and sugary; the best flavored variety we have ever tested, excepting the Apple Plum described above. The tree is very productive. Ripens last of August.

Wickson. The largest Japan Plum. Maroon-red; flesh firm and long-keeping, of good quality. A promising new variety.

Hale. A handsome, globular, red-speckled Plum. Flesh soft and juicy, of good quality and peach-like flavor. Tree a good grower and productive. A very promising new variety, just introduced.

Satsuma. Large; very dark red; flesh blood-red, acid, of fair quality when fully ripe. Productive and late.

October Purple. A reddish purple Plum of large size; good quality. Its late-ripening and good-keeping qualities make it one of the desirable varieties.

EUROPEAN PLUMS

The varieties of the common, or European Plum (*Prunus domestica*), do best on heavy land, but will grow well on any soil, if given applications of ground-bone and potash.

Bradshaw. Fruit large, oval; reddish purple; flesh yellow, rather coarse, juicy and good. Tree very vigorous and has good foliage.

European Plums, continued

German Prune. Fruit long-oval; purple, with white bloom; flesh green, sweet. Tree a poor grower.

Green Gage. Round, small, green fruit; the flavor is exceedingly sweet and rich, unequaled by any other. A small, compact tree.

Lombard. Medium to large; dark red; flesh deep yellow, of pleasant flavor, but not rich. The tree is one of the most vigorous of the Plum family and is productive and well adapted to light soils.

PERSIMMON, AMERICAN

A large, handsome tree, with lustrous leaves. Skin and flesh of fruit brick-red, soft and sweet after frost. Native to wet ground on Long Island. We are testing new named varieties.

QUINCES

Price, 4 to 5 feet, 50 cts. each, \$4 for 10

Champion and **Orange.** Large, bright yellow; good quality and long-keeping.

CHERRIES

Price, 5 to 6 feet, 50 cts. each, \$4 for 10; 6 to 7 feet, 75 cts. each, \$6 for 10

The Cherries are among the most satisfactory fruits to raise for home use. They grow well on all Long Island soils, and annually set large crops. Cherries may be divided into four groups:

HEARTS. With soft flesh, heart-shaped, sweet. The dark red varieties are in this class. This and the next are sometimes called "Oxhearts."

BIGARREAU'S. With hard flesh, heart-shaped, sweet, mostly of the lighter colors.

DUKES. Like the above, but with acid or sub-acid fruits.

MORELLOS (Sour Cherries). Flesh sour; tree smaller than the others, with slender branches and narrow leaves.

HEART CHERRIES

Governor Wood. Large, heart-shaped, yellow fruit, marked with red; sweet, juicy flesh. A rich and delicious Cherry.

Coe's Transparent. Medium size; amber color, with a red cheek; very tender, melting, sweet. Ripens early, just before Tartarian. Tree thrifty.

Black Tartarian. Fruit very large, nearly black. Flesh dark purple, firm, sweet and juicy, with a small pit. Tree a rapid grower. The long, upright branches of this variety, hung with luscious fruits, are a beautiful sight.

Downer's Late Red. Medium size; red and amber; flesh tender, melting, rich; not good till fully ripe. This variety is late and hangs on the tree after it is ripe without decaying, as many other kinds do. Ripens first half of July. The birds molest it but little, as it ripens about the time of the wild Mazzards.

BIGARREAU CHERRIES

Rockport. Large; clear red, shaded with amber; flesh firm, juicy, sweet, rich. Ripens early. Tree upright and vigorous.

Bigarreau Cherries, continued

Yellow Spanish. Very large, often an inch in diameter; waxy yellow, with a light red cheek; flesh firm, and of fine, rich flavor.

Napoleon. Very large, heart-shaped; pale yellow and amber, shaded with deep red; flesh very firm and of good flavor. Ripens after midseason. Tree vigorous and productive.

Windsor. Large; mottled red; very firm and juicy, of good quality. The tree is upright, vigorous, and a heavy bearer. A desirable late Cherry, as it hangs a long time and rots but little.

Mercer. A very dark red Cherry; productive and early; of good flavor, and not liable to rot.

Schmidt's. The largest of all the black Bigarreau Cherries. The fruit grows in clusters; the flesh is dark, tender and very juicy.

DUKE CHERRIES

Mayduke. Large, round; red, changing to nearly black when ripe. Flesh very juicy and melting; acid. Quite early.

MORELLO CHERRIES

This class is excellent for cooking and preserving.

Early Richmond (English Pie Cherry). Small to medium in size; beautiful red, very juicy, acid. Tree productive.

Montmorency. Large, round; bright red; moderately sour. A good bearer, which fruits young. One of the best of its class.

Morello (English Morello). Medium to large; dark red to nearly black. Flavor a rich acid, with some astringency, making it desirable for cooking. It ripens after midsummer.

MULBERRIES

75 cts. to \$1 each

Downing Everbearing. Large, black, sweet fruit. A handsome shade tree.

New American. Fruit of the best flavor. Ripens from June to September.



Spraying for San Jose Scale once a year with lime and sulphur costs but little. Orchard of J. H. Hale, Connecticut

GRAPES

Price, 2-year-old, 15 to 25 cts. each, \$10 to \$20 per 100.
Extra-size, 3 years old, 30 cts. each

Grapes are easily grown by any one, and on the smallest bit of ground. There is room along any garden fence or walk for a dozen vines to furnish this most delicious of fruits for home use, from August until November. Training on the sides of buildings is recommended, as the fruit is less liable to decay.

The vines will fruit under unfavorable conditions, but good culture, pruning and spraying pay, if fruit of best quality is desired. Commercial grape-growers find it necessary to spray with Bordeaux Mixture occasionally during the growing season, to keep in check mildew on the foliage, and rotting of the fruit. Protecting the clusters, as soon as formed, by pinning over them 2-pound paper bags, prevents injury from fungus, storm and birds.

Cottage. Bunch small; berry large, black; pulp tough and sweet. A good early black variety.

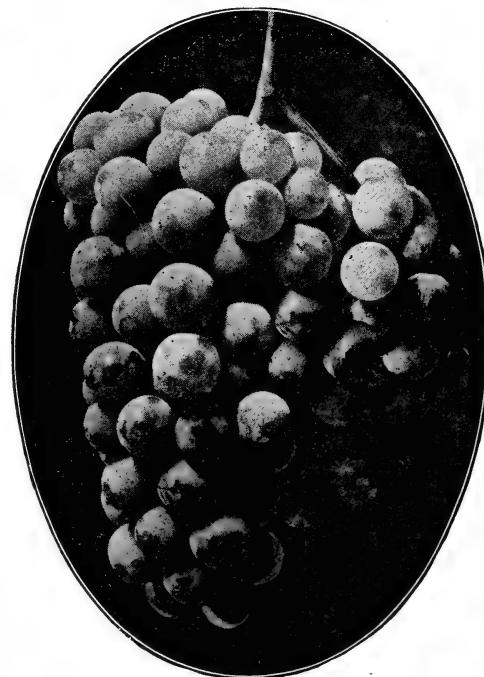
Moore's Early. Large; black; good flavor.

Delaware. This early Grape is very distinct from all others, and worthy the care necessary to grow it. Bunch and berry small; skin thin, light red, translucent; exceedingly sweet and aromatic.

Lady. Bunch and berry medium size; greenish yellow; tender and sweet; early.

Niagara. Bunch large, compact; berry large; skin pale yellow or white; flesh tender and sweet; vine vigorous and productive. The handsomest white Grape, ripening in midseason, with Concord.

Worden. Berry very large, black; skin and pulp tender and sweet. Ripens ten days ahead of Concord and is superior in quality.



Grapes for home use can be grown on any part of Long Island. Paper bags over the fruit, and spraying with fungicides, will produce perfect results.

Grapes, continued

Green Mountain. Berry of medium size, white; pulp tender, juicy, very sweet and rich.

Diamond (Moore's Diamond). Berry large, white, translucent; flesh juicy and almost without pulp; quality very good. Vine vigorous and productive.

Concord. Bunches compact, large; berries large; skin black and tender; flesh juicy and sweet. Extreme hardness, vigor, productiveness, and the fine appearance of its clusters have rendered Concord the most popular Grape.

Herbert. Berry medium size, black, tender, sweet and rich.

Salem. Bunch and berry large; dull red, tender, of good flavor.

Agawam. Bunch and berry large; dull reddish brown; flesh tender.

Pocklington. A light golden yellow Grape of good quality, ripening after Concord. A strong grower.

GOOSEBERRIES

Price, 2-year-old bushes, 20 cts. each, \$1.50 for 10, unless otherwise noted

Gooseberries thrive in any garden soil, and are very satisfactory for home use.

Downing. Medium to large, pale green; very good; bush upright, spiny, productive.

Chautauqua. Bush very vigorous. Fruit large, smooth, translucent. Sweet and productive.

Industry. The best foreign variety. Berry very large, dark red. Bush vigorous, healthy and productive. \$2 for 10.

CURRANTS

Price, 2-year-old bushes, 15 cts. each, \$1 for 10

Currants are easily grown and are naturally fruitful. The worm is readily controlled by hellebore powder, and San Jose scale by Scalecide.

Cherry. Very large, dark red berries; clusters moderately short; quite acid.

Fay's Prolific. Very large berries on long stems; sprightly and acid; easily picked. A most popular variety.

White Grape. Large, beautiful white berry; bunch short; quality excellent. A very pleasant Currant to eat off the bush, as it is less acid than the others.

Black Naples. Large, black bunches; berries small, with a strong, musky flavor. Valuable for cooking and jams.

RASPBERRIES

Price, 50 cts. for 10, \$4 per 100

The plants should be set in rows 6 feet apart and 3 feet apart in the row.

RED AND YELLOW RASPBERRIES

Miller's Red. Berry large, firm, bright red.

Marlboro. Bright scarlet fruit of large size. Early.

Cuthbert. Very large, pointed, deep red berries of delicious flavor. This beautiful variety should be planted largely. Ripens midseason to late.

Red and Yellow Raspberries, continued

Columbian. Large purplish red fruit with a sprightly flavor; vigorous and productive.

Golden Queen. Yellow, soft, juicy, sweet fruit. Resembles Cuthbert in form and flavor, and therefore is an excellent dessert variety.

BLACK-CAP RASPBERRIES

These ripen earlier than the red kinds, and follow Strawberries.

Souhegan. Fruit large and handsome; plant a strong grower and hardy. Ripens early.

Gregg. One of the largest of the blackcap family; fruit large, black, with a slight bloom; moderately juicy, sweet and rich. Ripens late and evenly.

BLACKBERRIES

Price, 50 cts. for 10, \$4 per 100

Being easy to grow, Blackberries are a valuable fruit for home use. As they ripen from early July to the middle of August, they complete the season of small fruits until the Peaches begin to ripen. To avoid too strong a growth and straggling habit, the ends of the shoots may be cut off at 3 feet in mid-summer. Plant 6 x 3 feet.

Lucretia Dewberry. Large, coreless, juicy, sweet fruit; most delicious for the table. Ripens before all the others. A running Blackberry that can be trained to a trellis.

Erie. A valuable new variety; large, very early and productive. Desirable as a market berry.

Eldorado. Large berries, borne in large clusters; vines are vigorous and hardy; one of the best for table use.

Early Harvest. Of medium size, good quality and prolific; very early. It is firm, and therefore a good shipper.

Agawam. A large berry of excellent flavor. Hardy and productive.

Snyder. Berries of medium size, nearly globular, of good flavor; very hardy.



Raspberries are an essential in the home garden. The principal attention is to hoe up the extra suckers, leaving a few stalks to each hill.

STRAWBERRIES

Price, \$1 per 100; in August and September, \$2 per 100

A garden without Strawberries is incomplete. If Strawberry plants are put out in August and September, they will bear fruit the following June. They may be planted in April and May, and each plant allowed to make a dozen or more runners and young plants, which bear freely the following season. The beds had best be allowed to fruit only two years and then be renewed. Free cultivation should be followed the first year, and the plants covered with straw, manure, or salt hay for the winter. In the spring, as the growth commences, this litter may be raked off between the rows to form a mulch, which prevents the growth of weeds and conserves the moisture, as well as protects the ripening berries from the soil. Clippings from the lawn make an excellent mulch for this purpose. By planting four or six varieties, early, medium and late, and giving them good cultivation, the fruiting season will extend from the last week in May to the first week in July.

PER. indicates perfect-flowered.

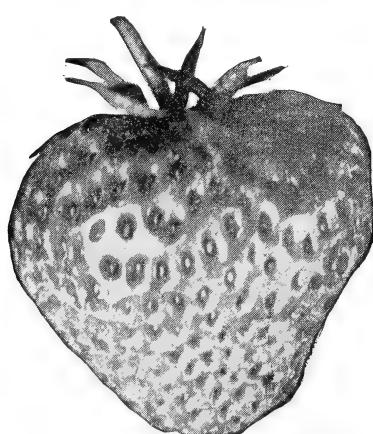
IMP. indicates imperfect-flowered. Plant with perfect-flowered varieties near.

Excelsior. Per. A firm, productive, high-colored berry; the chief quality is earliness.

Sharpless. Per. Very large, conical or wedge-shaped; white at the tip when not fully ripe; good flavor.

Bubach. Imp. Fruit of largest size and excellent flavor. A prolific grower with vigorous foliage. A standard sort.

Bismarck. Per. This resembles the Bubach in its excellent qualities, and is slightly smaller.



Strawberries planted in spring multiply rapidly and bear heavily the June of the next year. Those planted in August bear the next season but do not have time to multiply.

Strawberries give the quickest returns of all the fruits we offer. Insects and fungi are not serious. To ward against loss by the birds, have a plenty.

Strawberries, continued

Beecher. A vigorous, strong-growing variety with healthy foliage. Good flavor and size.

Clyde. Per. Fruit large, abundant, mild flavor. Foliage not so strong as some others.

Gandy. Per. One of the latest, if not the latest in cultivation.

Glen Mary. Per. A long, tapering fruit of mild sweet flavor. This variety is delicious for the table, but not sprightly enough for preserving.

Nick Ohmer. Per. A vigorous grower; handsome berries of good market quality.

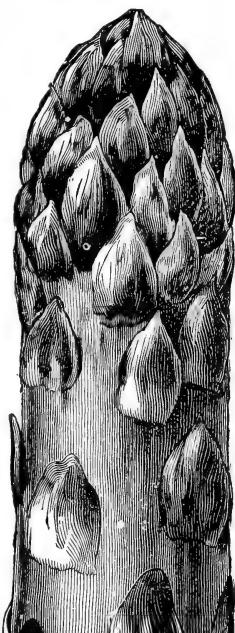
Nut Trees

In rural and suburban districts, the great economic possibilities of growing edible Nuts are but vaguely understood. They can often be planted along fence lines where they will not affect farming or gardening operations, and, later, will become a profitable source of income, either in the market or for the owner's use. The United States is importing vast quantities which might be raised at home with profit and credit. For Chestnut bark disease, see page 14.

CHESTNUTS

American. *Castanea Americana*. The only species of our forest. The nuts are of finest sweet flavor. An immense, broad-spreading tree in the open. Plant 60 feet apart.

Paragon. A variety of Spanish, or European Chestnut which is hardy, possibly a hybrid with the American. It is very precocious, bearing the year after grafting. The nut is large, and of very good quality. It is the most uniformly successful Chestnut in the United States.



Long Island is famous for its *Asparagus*, which is commercially grown on the light sandy land, mapped as Norfolk sand in Soil Survey of Long Island by the United States Department of Agriculture.

Japan. Nuts very large. Tree vigorous and productive, even when young. Plant 20 feet apart in the orchard. Immune to the Chestnut disease. A handsome, healthy tree or large shrub for mass planting. We have a large stock at low rates, and several improved varieties. See page 15.

FILBERT, or HAZELNUT

Kentish Cob. The large English variety.

American. Our native Hazelnut. See page 58.

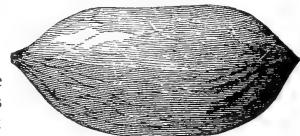
HICKORY

Shagbark. Shell thin; meat of good flavor. These grow well on Long Island, and should be more extensively planted for their excellent nuts.

Mockernut. The common native Hickory of Long Island. See page 16.

PECAN

We have a large stock raised from trees at its northern limit in Indiana, and, therefore, hardy. There are bearing trees on Long Island.



We have thousands of *Pecan* trees raised from nuts as large or larger than this illustration, which should be hardy here because from Indiana. There are two old bearing trees in the garden of Mr. J. A. Burden, Jr., Westbury, L. I.

WALNUT

English. Madeira Nut. There are a

number of productive trees on Long Island. Tree tender while young. See page 27.

Japan. Similar to the English, but smaller. Tree very vigorous. See page 27.

Black. Nuts large, rough, black; kernel rich and oily. One of our largest forest trees.

BUTTERNUT

Nuts long; kernel of rich flavor. Plant in deep, moist soil for best results.

Garden Plants

ASPARAGUS, Conover's Colossal. 1-year-old, 75 cts. per 100; 2-year-old, \$1 per 100, \$7 per 1,000.

RHUBARB, Linnaeus. Early, tender and very large, possessing a rich flavor. 25 cts. each; smaller roots, 15 cts.

HOPS. 15 cts. each.

SAGE, Broad-leaved. The tender leaves and tops of this plant are used in sausage, in stuffing, and in sauces. 25 cts.

THYME. Used for flavoring. 25 cts. each.

HORSE-RADISH. A few roots will give a supply of this fine relish. 10 cts.

UDO. *Aralia cordata*. Introduced by D. Fairchild, Agricultural Explorer, United States Department of Agriculture. The blanched shoots are sliced and served with salad dressing. Plant vigorous; grown like asparagus.

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- SHRUBS, large and quick for immediate effect,—Althæa, Catalpa, Deutzia, Red-twigged Dogwood, *Elæagnus umbellata*, Forsythia, Hercules' Club, Upright Honeysuckle, Tartarian Maple, Privet, *Spirea opulifolia*, *Styrax Japonica*, Sumach, Sweet Pepper Bush, Syringa, Viburnum, Weigela.
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- TREES FOR SYMMETRY.—Linden, Norway Maple, Trimmed Silver Maple, 7.
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Planting a Tree

HOLES.—Dig wide, deep holes. If the subsoil is poor, dig $2\frac{1}{2}$ feet deep, and fill the bottom with a foot of good soil mixed with one-fourth rotted manure.

TRIMMING.—Trim as shown in the picture, cutting back half of last year's growth on the ends of the main branches. Cut out most of the inside twigs. Leave some buds on every branch. Cut close to a bud or side branch.

Trim Shrubs by removing the old or largest shoots. Do not trim to a round form.

ROOTS.—Avoid breaking by rough handling. Cut smooth the broken roots, as at A, and spread roots in natural position the same depth as before. Pack the soil firmly under and between the roots, leaving no air spaces. Soak the ground thoroughly.

MULCH.—Cover ground with a mulch of strawy manure, leaves or salt hay, or keep a dry, fine earth-mulch by hoeing 4 inches deep and wider than the roots extend, once in two weeks, all summer, especially a day after heavy rains or watering. The next spring dig in the mulch, add fertilizer and more mulch.

FERTILIZERS.—Manure is not a complete plant-food. Apply on top or mix in the soil, but not against the roots, one quart of fertilizer, which should contain 5 to 10 per cent of potash. Wood-ashes and bone-flour are excellent. Avoid too much manure, as it may rot the roots.

WATER.—Water once a week, or once in two weeks, from May to August, by soaking the ground thoroughly with half a barrel of water, unless there are heavy and frequent rains. Over-watering and too frequent watering often kills trees.

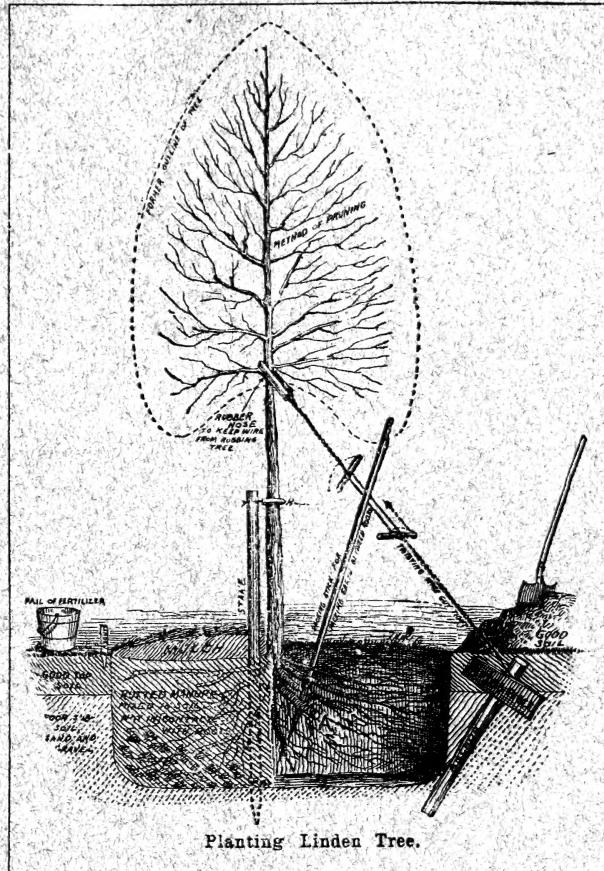
Keep down weeds. A few weeds will take up more food and water than the tree.

HEELING-IN.—To heel-in, or temporarily plant trees on arrival, dig a trench large enough to contain all the roots and place the trees in it in a slanting position, spread out the roots, pack earth around, and water. Covering the ground with a mulch of leaves or litter will be found to be very beneficial to them.

STAKES.—Stakes or guys are needed only with tall or large trees, or those with poor roots. A tree of the size shown, with good roots, needs no stake or wire. For larger trees, rig three or four double wire guys, and twist tight, as shown. For smaller or slender trees use a 3×3 -inch stake, running it up into the top if necessary, and fasten closely to the tree by cord and hose or burlap bands. To protect from horses on the street, place galvanized wire cloth (1-inch mesh) around the tree and nail it to the stake.

EVERGREENS.—Evergreen tree roots must not be allowed to dry out in the least. If possible, select a foggy time for moving them, and in doubtful cases set a barrel of water near and sprinkle the tops several times a day for a week or two. When carting trees, use blankets or sail-cloth to cover the roots.

If these directions are intelligently followed, and trees do not live and grow, please write us.



Planting Linden Tree.

CERTIFICATE OF INSPECTION OF NURSERY STOCK

This is to certify that the stock in the nursery of Isaac Hicks & Son, Westbury Station, county of Nassau, state of New York, was duly examined in compliance with the provisions of Section 83 of the Agricultural Laws, and it was found to be apparently free from any contagious or infectious disease or diseases, or the San José scale or other dangerously injurious insect pest or pests. This Certificate expires September 1, 1910.

R. A. PEARSON, Commissioner of Agriculture.

Dated September 17, 1909, Albany, N. Y.



ISAAC HICKS AND SON
Westbury . . . New York